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ABSTRACT

Discusses the efforts of the Career and Technical Education programs offered by the Illinois Community College System to provide people with the skills and training needed to compete successfully in the workforce of the future. Describes the acquisition of such skills and training to be increasingly crucial. Emphasizes that with increasing numbers of job cuts and layoffs there is a rising trend of employees attempting to upgrade their skills and seek retraining. Data for the Illinois Community College System's Career and Technical Educational Follow Up Study Report were obtained from responses to a standardized survey. A total of 2,102 former students who graduated from selected Illinois community college programs were surveyed in March 2003, but only 1,214 of those responses were usable, yielding a usable response rate of 59%. Part one of the report provides a statewide overall summary of survey outcomes. Part two includes an in depth analysis of survey results according to specific program areas for colleges to use in reviewing their programs during the economic year. Contains 17 references, 23 figures, 2 tables and 3 appendices. Appendix A presents a summary of responses by college and response rates by program area. Appendix B presents provides information by survey item, and Appendix C presents data by both college and program. (JS)

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FOLLOW-UP STUDY

of Fiscal Year 2002 Career and Technical Education Program Graduates

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Illinois Community College Board

FOLLOW-UP STUDY OF FISCAL YEAR 2002 CAREER AND TECHNICAL EDUCATION PROGRAM GRADUATES

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Illinois Community College Board

FOLLOW-UP STUDY OF FISCAL YEAR 2002
CAREER AND TECHNICAL EDUCATION PROGRAM GRADUATES

INTRODUCTION

Career and Technical Education programs offered by the community colleges provide people with the skills and training needed to compete successfully in the workforce of the future. This attainment of skills and training has become more crucial in recent years as the economy has continued to weaken. As a result of increasing layoffs and job cuts, there has been a rising trend of employees attempting to upgrade their skills and dislocated workers seeking retraining. In addition, recent graduates are encountering a lean job market. According to Job Outlook 2003, 'The sluggish economy continues to exact a toll on college students looking for their first professional jobs. Employers blame the shrinking number of job opportunities for members of the class of 2003 on diminished hiring needs, on their organizations having fewer clients requiring services, budgetary cutbacks, hiring freezes, low attrition, and layoffs" (http://www.jobweb.com/joboutlook/default.cfm).

Job cuts and layoffs have affected a wide range of areas of employment. For example, the media industry has seen 30,000 cuts in editorial and business positions over the past 2 and a half years (http://www.journalismjobs.com/layoffs.cfm). Travel and tourism-related companies have announced 305,306 job cuts, representing 25 percent of the 1,229,129 reductions announced since the terrorist attacks of September 11, 2001 (http://sacramento.bizjournals.com/sacramento/stories/2002/04/15/daily44.html). In the retail business 51,078 job cuts were announced, including the 22,000 job losses in the early part of 2002 (http://www.sfgate.com/cgi-bin/article.cgi?f=/n/a/2002/04/04/financial1640EST0260.DTL&nl=biz). The manufacturing industry has also suffered recently. According to IMA President and CEO Gregory W. Baise, "America is losing manufacturing jobs at an alarming rate and Illinois has certainly not been immune to these losses," (http://www.ima-net.org/news/story.cfm?ID=406). Stephen Stanley, an economist at RBS Greenwich Capital Markets has stated, "The bottom line is that the manufacturing sector is stagnant and any recovery will be slow and gradual" (http://in.news.yahoo.com/021202/137/ 1yqh1.html).

Revitalizing the manufacturing industry is of vital importance. The industry has a substantial impact on the nation's economy. Every dollar of specific manufacturing production creates an additional $0.67 in other manufactured products and $0.76 in products and services from non-manufacturing sectors. Manufacturing contributes more than 60 percent of U.S. investment in research and technology, and manufacturing workers make 20 percent more than the average wage. As a result of unprecedented foreign competition, rising costs due to rising health care costs, soaring runaway litigation, and excessive regulation, firms have been forced to cut back on R&D and capital investment, and to reduce employment (http://www.ima-net.org/news/ story.cfm?ID=403).

Despite the negative condition of the manufacturing industry as a whole, there are certain sectors within the industry which have a positive outlook. For example, manufacturing engineers are in demand by a variety of employers because they are viewed as people who can contribute greatly to productivity and competitiveness in the world marketplace. (http://www.tcd.ie/Senior.

Lecturer/Admissions/courses/day/esengmems.html). In addition, the employment of mechanical engineers in manufacturing should increase more rapidly as the demand for improved machinery and machine tools grows and industrial machinery and processes become increasingly complex (http://www.mechanicalengineer.com/oohinfo.htm#Outlook). Employment of heating, air-conditioning, and refrigeration mechanics and installers is expected to increase faster than the average for all occupations through the year 2010. As the population and economy grow, so does the demand for new residential, commercial, and industrial climate-control systems (http://www.bls.gov/oco/ocos192.htm#outlook). In the areas of machine setter, operator, and tender, employment will become available due to an expected surge in retirements as the first of the baby boomers become eligible for retirement by the end of this decade (http://www.bls.gov/oco/ocos224.htm#outlook).

Community colleges have been regarded as a crucial element in the training of future manufacturing workers. According to Jerry Jasinowski, president of the National Association of Manufacturers (NAM), "Community colleges continue to get top billing as the preferred choice of education and training supplier to manufacturing firms. Increasingly, they have moved their skill and faculty to firms to do the desired training instead of waiting for the workers to come to them" (http://www.aacc.nche.edu/Template.cfm?Section=Journal_Articles&template=/ContentManagement/ContentDisplay.cfm&ContentID=10959&InterestCategoryID=217&Name=Journal%20Article&ComingFrom=InterestDisplay). Graduates from selected manufacturing fields were surveyed in this report. Outcomes in terms of employment, continuing education, and salary were fairly positive. This report also contains survey responses of graduates from various other career and technical education programs.

Data for the Illinois Community College System's *Career and Technical Education Follow-up Study Report* were obtained from responses to a standardized survey. The information provided by graduates of selected programs regarding the effectiveness of their college experience and documents program outcomes. The survey instrument addresses attendance objective, education status, employment status, salary, employment start-up, geographic location of employment, and satisfaction with employment, services and components of the educational program completed. Satisfaction ratings by graduates reflect the combined percentage of respondents who were satisfied and very satisfied with a survey item. When reviewed at the local level this information has implications for colleges as they develop proposals for new programs and perform program review. Colleges use the information to stay aligned with the changing job market and gauge the employment and compensation outcomes of their graduates. Part I of the report provides a statewide overall summary of survey outcomes. Part II includes an in-depth analysis of survey results according to specific program areas for colleges to use in reviewing their programs during the coming year. The Appendices contain data tables derived from the results of the survey. Appendix A presents a summary of responses by college and response rates by program area. Appendix B provides information by survey item, and Appendix C presents data by both college and program.

A total of 2,102 (Table A-2) former students who graduated from selected Illinois community college programs in fiscal year 2002 were surveyed in March 2003. For most graduates, this was approximately six to nine months after program completion. Following receipt of the completed surveys, graduates from the following ten program areas were eliminated from the statewide analysis due to a low number of responses or low number of graduates: Surveying; Graphic and Printing

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Equipment Operators, General; Mechanical Typesetter and Composer; Printing Press Operator; Numerical Control; Graphic Design, Commercial Art and Illustration; Opticianry/ Dispensing Optician; Ophthalmic Medical Technologist; Finance, General; and Investments and Securities. Removing these 10 selected programs and their responses resulted in the utilization of 1,214 responses from a pool of 2,056 graduates. Therefore, the survey yielded a usable response rate of 59.0 percent (Table A-1). Table A-2 shows response rates by program.

The majority of graduate usable respondents (63.3 percent) came from programs in four broad CIP areas: Mechanical Engineering-Related Technologies; Heating, Air Conditioning, and Refrigeration Mechanics and Repairers; Precision Metal Workers; and Accounting. Graduates from the remaining program areas combined accounted for the remaining 36.7 percent of the respondents. Overall statewide results are influenced by differences in program size and in the number of graduates responding to particular questions. Percentages cited throughout the report reflect the number of responses to each question.

Table 1

CAREER AND TECHNICAL EDUCATION PROGRAM AREAS SURVEYED IN FY 2003 BY CIP CATEGORY

CIP	Title
1203	FUNERAL SERVICES AND MORTUARY SCIENCE
120301	Funeral Services and Mortuary Science
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES
150702	Quality Control Technology/Technician
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES
150805	Mechanical Engineering/Mechanical Technology/Technician
150810	Computer-Aided Design
1511	MISCELLANEOUS ENGINEERING-RELATED TECHNOLOGIES*
151102	Surveying*
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS
200501	Home Furnishings and Equipment Installers and Consultants, General
2503	LIBRARY ASSISTANT
250301	Library Assistant
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPAIRERS
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers
4801	DRAFTING
480102	Architectural Drafting
480105	Mechanical Drafting
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS
480201	Graphic and Printing Equipment Operators, General*
480205	Mechanical Typesetter and Composer*
480206	Lithographer and Platemaker
480208	Printing Press Operator*
480212	Desktop Publishing Equipment Operator

Table 1

CAREER AND TECHNICAL EDUCATION PROGRAM AREAS SURVEYED IN FY 2003 BY CIP CATEGORY
(Continued)

CIP	Title
4805	PRECISION METAL WORKERS
480501	Machinist/Machine Technologist
480503	Machine Shop Assistant
480506	Sheet Metal Worker
480507	Tool and Die Maker/Technologist
480508	Welder/Welding Technologist
480520	Numerical Control*
5004	DESIGN AND APPLIED ART
500401	Design and Visual Communications
500402	Graphic Design, Commercial Art and Illustration*
500406	Commercial Photography
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS
511004	Medical Laboratory Technician
5118	OPHTHALMIC/OPTOMETRIC SERVICES *
511801	Opticianry/Dispensing Optician*
511803	Ophthalmic Medical Technologist*
5203	ACCOUNTING
520302	Accounting Technician
5208	FINANCIAL MANAGEMENT SERVICES
520801	Finance, General*
520803	Banking and Financial Support Services
520807	Investments and Securities*

* Excluded from state report due to low number of graduates or low response rates.

Part I: STATEWIDE OVERVIEW

Follow-up surveys were mailed to graduates of the selected career and technical education programs identified in Table 1 in spring 2003, approximately six to nine months after graduation. Graduates reported the following:

- 88.8 percent were employed or pursuing additional education or both (Table B-1).
- 82.0 percent of the completers were employed (Table B-2).

  Among working graduates,

  - 83.6 percent held full-time status in their current jobs (Table B-2).
  - 72.6 percent were employed in positions related to the field in which they studied at the community college (Table B-5).
  - 69.0 percent obtained their current positions while enrolled or after graduating (Table B-7)
  - 92.4 percent were employed in Illinois. Of those, approximately 77.2 percent remained in the district where they received their training (Table B-8).
  - The average salary for all working graduates was $14.62 per hour -- 2.8 times minimum wage at the time of the survey ($5.15 per hour) (Table B-9).
- Graduates employed in full-time positions earned the equivalent of $31,886 annually.
- The average rate of unemployment (the percent of graduates who were unemployed and seeking work) was 10.4 percent (Table B-2).
- Nearly twenty percent of the respondents were pursuing additional education. More than three-quarters of those enrolled in further study were taking course work in a related field (Table B-4).
- Graduates employed in positions related to their community college program were satisfied with their current positions (86.1 percent). Job satisfaction averaged 66.9 percent when graduates in unrelated positions were included. (Table B-10).
- Nearly eighty-nine percent of graduates expressed satisfaction with components of the program they completed (course content, lecture/lab experiences, equipment, facilities and materials, job preparation, preparation for further education, and labor market employment information) (Table B-11).

- A little over 83 percent of the graduates were also satisfied with college services, such as financial aid, academic advising, career planning, transfer planning, counseling, tutoring, library/audio visual, student activities -- Table B-12).

Graduates from similar program areas were surveyed five years ago. A comparison of follow-up survey outcomes from 1997 and 2002 (Figure 1) reveals differences between the two groups. Generally graduates from similar programs five years ago exhibited higher performance and outcomes than the more recent graduates. Part of the difference can be attributed to differing overall economic conditions at the two points in time. Illinois' economy was more favorable five years ago than it has been this year. Statewide unemployment in Illinois was 5.8 percent in 2003 and 4.7 percent in 1998. State unemployment figures are from March of the respective year which corresponds with the time frame when the surveys were conducted.

Comparative information shows that a larger proportion of 1997 graduates were employed, continuing their education or both (92.2 percent for 1997 versus 88.8 percent for 2002). The percentage of graduates employed in 1997 was 87.6 percent versus 82.0 percent for the recent completers. A slight increase was noted in the percentage of survey respondents exclusively pursuing additional education among more recent graduates (7.6 percent for 2002 versus 5.4 percent for 1997). The percentage of recent graduates who were unemployed and seeking work was higher for the more recent group (10.4 percent versus 5.2 percent). Approximately 71.4 of the recent graduates, and 61.5 percent of the earlier completers were working in the community college district in which they received their training. Earnings were up as the average hourly wage of $14.62 increased $2.15 from five years ago for all workers. (Note that the minimum wage did not increase at all over the same period of time.) A larger percentage of the 2002 graduates were employed in their current position prior to program enrollment (31.0 percent among 2002 completers versus 27.9 percent for 1997 completers). One possibility is that more recent graduates are upgrading job related skills to position themselves for career advancement. Earlier graduates exhibited higher satisfaction ratings with their employment. Satisfaction with program components and college services were very similar.

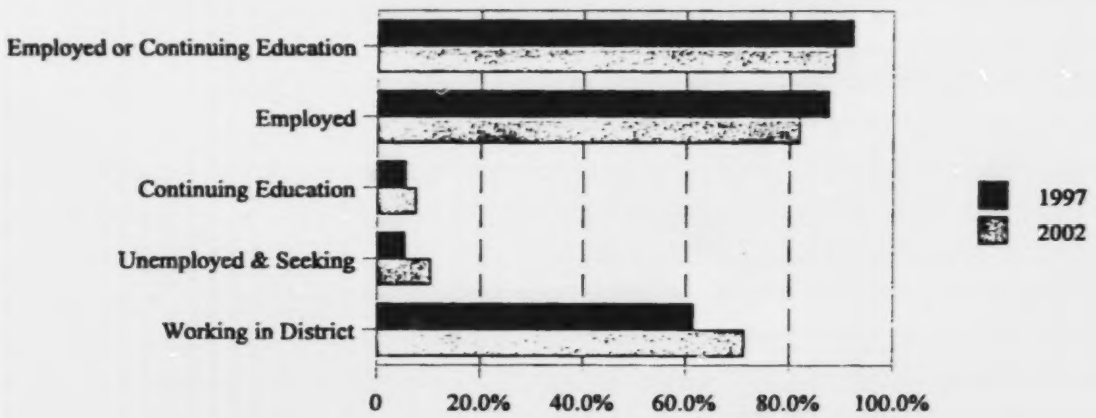

Figure 1. Comparison of Career and Technical Education Graduates: FY 1997 & FY 2002

Part II: PROGRAM-SPECIFIC ANALYSIS

In this portion of the report results from individual programs are examined. Occupational overview, employment outlook, and earnings are adapted from authoritative sources that provide indispensable contextual and comparative information. Two primary sources are used for state and national information and data. The *Career Information System* (2003) contains Illinois specific employment projections and salary data and is created by a division of the Illinois Department of Employment Security. National overview, outlook and earnings data are provided by the *Occupational Outlook Handbook* (2002-2003) which is produced by the U.S. Bureau of Labor Statistics. The contributions by the authors of these reference documents are recognized and fully acknowledged.

In Illinois, jobs in Funeral Services & Mortuary Science are expected to increase more slowly than average through 2010, except for jobs in Embalming, which are expected to decrease (*Career Information System*, 2003).

Funeral Services & Mortuary Science

Students enrolled in Funeral Services and Mortuary Science Programs learn how to embalm, arrange, and conduct funerals and assist members of the medical profession in areas related to human remains. Embalmers make sure that a deceased body is cleaned, preserved, and made presentable for funeral rites. Funeral attendants help funeral directors during a funeral service for someone who has passed away. Funeral directors organize and direct funeral services. In Illinois, funeral directors and embalmers have a combined license obtained from the Illinois Department of Professional Regulation. Career opportunities in the funeral service professions are not limited to embalmer, funeral attendant and funeral director, but include grief counseling and pre-need sales. Graduates may also seek employment in state or county medical departments or hospitals in the pathology department or morgue (*Career Information System*, 2003).

According to the *Career Information System (2003)*, training in this professional area is limited. Two Illinois community colleges, Carl Sandburg College and Malcolm X College, graduated 30 individuals from Mortuary Science programs in Fiscal Year 2002, of whom 56.7 percent (N=17) responded to the follow-up survey. Survey results indicate that 66.7 percent (N=10) of respondents reported being employed, while 20.0 percent reported being unemployed and seeking employment. Of those employed, 70 percent (N=7) were employed full-time while 30 percent (N=3) were employed part-time. Fifty percent (N = 5) were employed within their respective community college district, while 50.0 percent (N=5) were employed either out-of-district or out-of-state. Of the respondents employed full- and part-time, 80.0 percent (N=8) were employed in a related field. Fifty percent of those Funeral Services & Mortuary Science graduates working in a related field reported being satisfied with their jobs.

In Illinois, the median wage for embalmers is $3,260 per month ($18.80 per hour); the median wage for funeral attendants is $1,485 per month ($8.55 per hour); and the median wage for funeral directors is $3,165 per month ($18.25 per hour). Nationally, the median wage for embalmers is $2,740 per month ($15.80 per hour); the median wage for funeral attendants is $1,410 per month ($8.15 per hour); and the median wage for funeral directors is $3,425 per month ($19.75 per hour)

according to the *Career Information System*, (2003). The average full-time hourly salary for Illinois community college Funeral Services & Mortuary Sciences FY 2002 graduates was $13.39, an approximate annual salary of $27,850, up from $11.62 per hour ($24,200 annually) in FY 1997. This wage is below the state and national median wages for both embalmers and funeral directors but higher than the state and national median wage for funeral attendants. Overall, 86.3 percent of graduates in this program area were satisfied with their major program components. In terms of curriculum related components, 100.0 percent were satisfied with equipment, facilities & materials, while 94.1 percent were satisfied with course content. In terms of employment related components, 82.4 percent were satisfied with their job preparation, while 70.6 percent were satisfied with labor market information provided to them.

Figure 2 compares Follow-up Study results from FY 1997 and 2002 Funeral Services & Mortuary Science graduates. The percent of respondents either employed or pursuing additional education decreased from 92.9 percent in FY 1997 to 73.3 percent in FY 2002. The total percent of respondents employed also decreased from 92.9 percent in FY 1997 to 66.7 percent in FY 2002. The percent of respondents pursuing additional education and not employed increased from 0.0 percent in FY 1997 to 9.1 percent in FY 2002. The percent of respondents unemployed and seeking employment increased from 7.1 percent in FY 1997 to 20.0 percent in FY 2002. The percent of respondents working within their respective community college district decreased from 76.9 percent in FY 1997 to 50.0 percent in FY 2002.

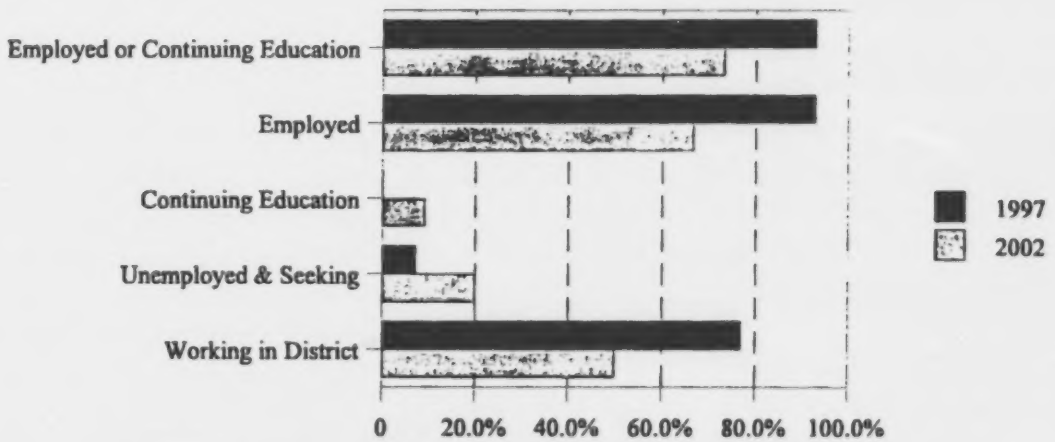

Figure 2. Funeral Services and Mortuary Sciences: FY 1997 & 2002

Bottom Line – In Illinois, Funeral Services and Mortuary Science is a small occupational field, with only a few accredited institutions offering programs of study in this area. With only two-thirds (66.7 percent) of FY 2002 program graduates employed full- or part-time, demand in this field appears to be declining, both within the state of Illinois and across the Nation. While 86.3 percent of graduates in this program area reported satisfaction with major program components, actual job satisfaction was quite different. Job satisfaction of respondents working in this field was ***the lowest among all program graduates surveyed*** in FY 2002.

In Illinois and nationally, jobs in Quality Control Technology are expected to decline through the year 2010 (*Career Information System*, 2003).

Quality Control Technology/Technician

Quality control technicians plan, implement and maintain activities related to quality systems development, project management, inspection, data analysis, statistical process control, experimental design, metrology and calibration of measuring and test equipment. They conduct process and product evaluations to ensure that certain standards are met and monitor these standards to ensure they follow manufacturing rules. Evaluations are performed through the use of a variety of techniques; including physical inspection, measurement, testing equipment, and statistical data analysis. They inspect a wide variety of processes and products ranging from industrial and engineering processes to electronic and mechanical equipment. Quality control technicians work at all stages of production, from the raw materials that go into production throughout the whole process, to the final, completed product. They keep records of and write reports based on their evaluations. Wherever necessary, these professionals may also develop quality control programs and recommend improvements in operating procedures (*Career Information System*, 2003).

According to the *Career Information System (2003)*, quality control inspectors is a medium-sized occupation group in Illinois that employs about 29,710 people. Nationally, about 602,100 quality control inspectors work in this medium-sized occupation. Most inspectors work in manufacturing. Not all Quality Control Technology graduates become inspectors. Other titles include quality engineer, quality coordinator, quality technician, quality facilitator and quality auditor.

During FY 2002, four colleges in the Illinois Community College System graduated students from programs in Quality Control Technology, including quality assurance, industrial quality control, and nondestructive evaluation technology (the examination of an object/material with technology that does not affect the object's future usefulness). Illinois Eastern Frontier and Lincoln Trail, Moraine Valley, and Rock Valley colleges graduated 23 students in Quality Control Technology, of whom 17 (73.9 percent) responded to the follow-up survey. Survey results show that 94.1 percent (N=16) of respondents reported being employed, while 0 percent reported being unemployed and seeking employment (5.9 percent reported being unemployed and *not* seeking employment). Of those employed, 93.8 percent (N=15) were employed full-time. Of the respondents employed full- and part-time, 87.5 percent (N=14) were employed in a related field and 81.3 percent (N=13)were employed within their respective community college district, while 18.8 percent (N=3) were employed out-of-district or out-of-state. Seventy one percent of Quality Control Technology/Technician graduates working in a related field reported being satisfied with their position.

In Illinois, the median wage for quality control inspectors is $2,045 per month ($11.80 per hour). Nationally, the median wage for quality control inspectors is $2,120 per month ($12.20 per hour). Half of all quality control inspectors earn between $1,605 and $2,870 per month ($9.25 and $16.55 per hour). The average full-time hourly salary for Illinois community college Quality Control Technology program graduates is $14.70; an approximate annual salary of $30,576, up slightly from $14.57 per hour ($30,305 annually) in FY 1997. Pay varies by the type of work being done. Work that requires more skill pays more than jobs that involve routine tasks.

Figure 3 compares Follow-up Study results from FY 1997 and 2002 Quality Control Technology/ Technician graduates. The percent of respondents either employed or pursuing additional education decreased from 100 percent in FY 1997 to 94.1 percent in FY 2002. The total percent of respondents employed increased slightly from 93.8 percent in FY 1997 to 94.1 percent in FY 2002. The total percent of respondents pursuing additional education and not employed increased from 0.0 percent in FY 1997 to 9.1 percent in FY 2002. The percent of respondents unemployed and seeking employment decreased from 6.7 percent in FY 1997 to 0.0 percent in FY 2002. The percent of respondents working within their respective community college district increased from 41.7 percent in FY 1997 to 81.3 percent in FY 2002.

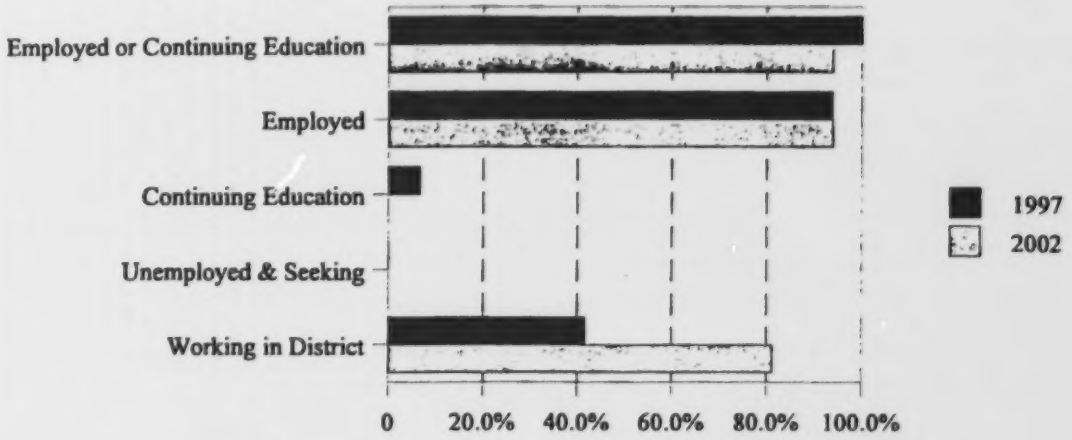

Figure 3. Quality Control Technology/Technician: FY 1997 & 2002

Bottom Line – In Illinois, Quality Control Technology/Technician is a medium-sized occupational field. With 94.1 percent of FY 2002 program graduates employed either full- or part-time, demand in this field seems to be strong, in spite of the projected decline in demand for quality inspectors expected through the year 2010. Quality Control Technology/Technician graduates from Illinois community colleges earned higher wages than both state and national averages in this field.

Opportunities in Mechanical Engineering-Related Technologies will be best for individuals with an associate degree or extensive job training in engineering technology (*America's Career InfoNet*, 2003).

Mechanical Engineering-Related Technologies

Mechanical engineering technicians help engineers design, develop, test, and manufacture industrial machinery, mechanical parts, consumer products, and other equipment. Their work is more limited in scope and more practically oriented than that of scientists and engineers. Many engineering technicians assist engineers and scientists, especially in research and development. Others work in quality control — inspecting products and processes, conducting tests, or collecting data. In manufacturing, they may assist in product design, development, or production. They may make sketches and rough layouts, record data, make computations, analyze results, and write reports. When planning production, mechanical engineering technicians prepare layouts and drawings of the assembly

process and of parts to be manufactured. They estimate labor costs, equipment life, and plant space. Some test and inspect machines and equipment in manufacturing departments or work with engineers to eliminate production problems (*Occupational Outlook Handbook*, 2002 - 2003).

Although employers usually do not require engineering technicians to be certified, such certification may provide jobseekers a competitive advantage. The National Institute for Certification in Engineering Technologies (NICET) has established a voluntary certification program for engineering technicians. Certification is available at various levels, each level combining a written examination in 1 of more than 30 specialties with a certain amount of job-related experience, a supervisory evaluation, and a recommendation. A variety of advanced certificate and associate degree Mechanical Engineering-Related programs are available at many community colleges in Illinois. Two community college system Mechanical Engineering-Related Technologies programs included in this report are:

Program Area	CIP Code
Mechanical Engineering/Mechanical Technology	150805
Computer-Aided Drafting	150810

In Illinois, Mechanical Engineering/Mechanical Technology/Technician jobs are expected to increase about as fast as average through 2008 (*Career Information System*, 2003).

Mechanical Engineering/Mechanical Technology/Technician

Mechanical technicians help engineers design, develop, research, test, and manufacture industrial machinery, mechanical parts, and other equipment. They may work with electric missiles, electric power plants, or industrial robots. Technicians' duties are more hands-on and limited in scope than those of engineers. A common duty for technicians is to assemble prototypes, which are versions of products that will be tested and modified. Technicians read blueprints or get directions from their supervisors about what to build. Once prototypes are built, technicians test them to see if they perform as expected and meet standards. They set up equipment to run tests on the prototypes. They may record and analyze test results on a computer. They discuss their findings with the engineers and may plan additional tests. Together with the engineer, they may decide what changes to make. Then technicians make a new prototype with those changes or explain the changes to the production staff. In manufacturing, technicians may choose a product off the line instead of create a prototype. They look for product quality. Sometimes technicians draw or sketch what products will look like so that contractors or other staff can build the prototypes. Once the testing is done, technicians may clean and repair the equipment (*Career Information System*, 2003).

Employment of engineering technicians is related to the economy and area of engineering. During slow periods, technicians will find fewer job openings. In Illinois, employment of engineering technicians is expected to increase about as fast as average through 2008. Nationally, the number of jobs for engineering technicians is expected to grow as fast as average through the year 2010. It is likely that the production of technical products will continue to grow. This growth will increase the need for technicians. However, advances in technology are making technicians more productive. Examples of these advances are computer-aided design and computer simulation. These advances

may reduce the number of technicians needed to do the same amount of work (*Career Information System*, 2003).

Twelve Illinois community colleges graduated a total of 36 students from Mechanical Engineering/Mechanical Technology/Technician programs in FY 2002, of whom 58.3 percent (N=21) responded to the follow-up survey. Survey results indicate that 85.7 percent (N=18) of these program graduates reported being employed. Of those employed, 77.8 percent (N=14) were employed full-time, while 22.5 percent (N=4) were employed part-time. Seventy six percent (N= 13) were employed within their respective community college district, while 23.5 percent (N=4) were employed either out-of-district or out-of-state. Of the respondents employed full- and part-time, 72.2 percent (N=13) were employed in a related field. Seventy-seven percent of those Mechanical Engineering/Mechanical Technology/Technician graduates working in a related field reported being satisfied with their jobs.

Both nationally and in Illinois, wages for engineering technicians vary by area of engineering. Median monthly wages for Mechanical Engineering technicians are$3,315 ($19.13 per hour and $39,780 annually) in Illinois and $3,300 ($19.04 per hour and $39,600 annually) nationally. This translates into annual wages of approximately $39,600 nationally and $39,780 in Illinois. The average full-time hourly salary for Mechanical Engineering/Mechanical Technology/Technician graduates from Illinois community colleges was $20.31 (approximately $42,244 annually), the third highest average of all FY 2002 program graduates and above both state and national median wages.

Figure 4 compares Follow-up Study results from FY 1997 and 2002 Mechanical Engineering/ Mechanical Technology graduates. The percent of respondents either employed or pursuing additional education decreased from 100 percent in FY 1997 to 90.5 percent in FY 2002. The total percent of respondents employed also decreased from 97.3 percent in FY 1997 to 85.7 percent in FY 2002. The total percent of respondents pursuing additional education and not employed increased from 2.7 percent in FY 1997 to 5.3 percent in FY 2002. The percent of respondents unemployed and seeking employment increased from 2.7 percent in FY 1997 to 4.8 percent in FY 2002. The percent of respondents working within their respective community college district increased from 51.5 percent in FY 1997 to 76.5 percent in FY 2002.

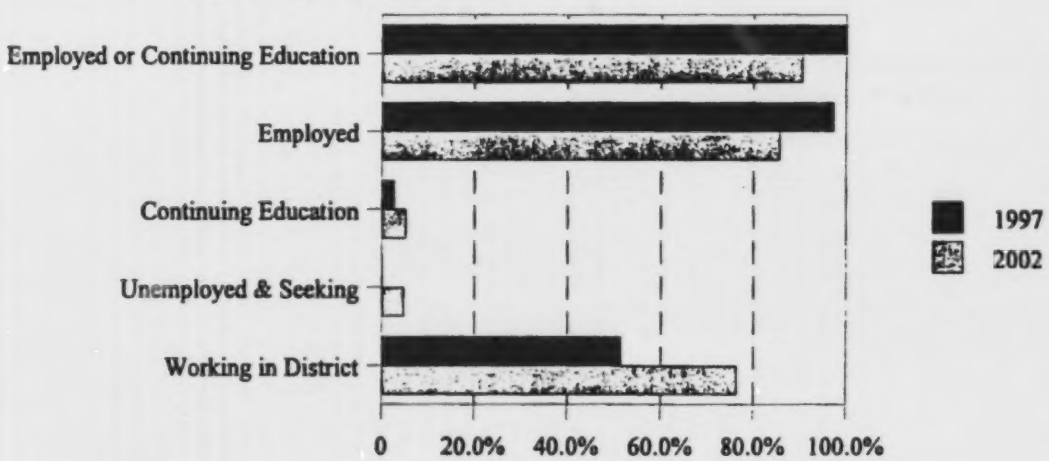

Figure 4. Mechanical Engineering/Mechanical Technology: FY 1997 & 2002

Bottom Line – In Illinois, Mechanical Engineering/Mechanical Technology/Technician is a medium to large occupational field, with several community colleges offering programs of study in this area. Employment opportunities vary with the economy and are expected to increase as fast as average through 2008 in Illinois. FY 2002 graduates from Illinois community college Mechanical Engineering/Mechanical Technology/Technician programs earned the third highest average hourly wage of all program graduates, as well as above average wages both statewide and nationally.

Computer-Aided Design programs prepare students for careers in drafting and/or graphic design. A decline is expected in employment of drafters while employment of artists & commercial artists, including graphic designers, is expected to increase faster than average through 2008 in Illinois (*Career Information System*, 2003).

Computer-Aided Design

Students enrolled in Computer-Aided Design programs learn how to use the latest computer technology to assist them in drafting and/or graphic design related careers. Drafters make detailed drawings of objects that will be manufactured or built as well as create designs to be produced in print, electronic, and film media. Drafters prepare technical drawings that show the technical details of the products and structures from all sides. They also include exact dimensions, specific materials to be used, and procedures to be followed. Graphic designers create brochures and ads to promote products or services, produce logos for products or businesses and create visual designs for company reports and other print materials. Some graphic designers work on design and layout for magazines or other publications (*Career Information System*, 2003).

In the United States drafting is a medium-sized occupation. About 9,930 drafters work in Illinois and about 213,100 drafters work in this occupation nationally. In Illinois, separate employment numbers for graphic designers are not available. In Illinois, graphic designers are included in the larger group of "artists and commercial artists," considered a medium-sized occupation group employing about 17,080people. About 189,900 graphic designers are employed nationally. A decline is expected in employment of drafters through 2008 in Illinois. However, the number of jobs for drafters is expected to grow nationally as fast as average through the year 2010. In Illinois, employment of artists & commercial artists, including graphic designers, is expected to increase faster than average through 2008. Nationally, the number of jobs for graphic designers is also expected to increase faster than average through the year 2010 (*Career Information System*, 2003).

In fiscal year 2002, 27 Illinois community colleges graduated a total of 273 students from Computer-Aided Design programs. Of those graduates, 50.2 percent (N=137) responded to the follow-up survey. Survey results indicate that 88.9 percent (N=120) of responding program graduates reported being employed either full- or part-time and 6.7 percent (N=9) reported being unemployed and seeking employment. Of the employed graduates, 83.3 percent (N=100) were employed full-time and 16.7 percent (N=20) were employed part-time. Of those employed full-time, 68.2 percent (N=73) reported being employed within their respective Illinois community college district, while 31.8 percent (N=34) reported being employed either out-of-district or out-of-state. Of the respondents employed either full- or part-time, 70.1 percent (N=82) reported being employed in a related field. Ninety-three percent of those Computer-Aided Design graduates working in a related field reported

being satisfied with their jobs, among the largest percentage of all Illinois community college programs.

Both nationally and in Illinois, the median wage for computer-aided designers varies by the area of specialization. Median monthly wages for Mechanical drafting are $3,155 ($18.20 per hour and $37,860 annually) in Illinois and $3,210 ($18.51 per hour and $38,520 yearly) nationally. Median monthly wages for graphic designers are $2,930 ($16.90 per hour and $35,160 yearly) in Illinois and $2,880 ($16.60 per hour and $34,560 yearly) nationally. Illinois community college graduates from Computer-Aided design programs earned an average full-time hourly salary of $15.75 ($32,760 yearly), slightly below the state and national median income levels for both drafters and graphic designers.

Figure 5 compares Follow-up Study results from FY 1997 and 2002 Computer-Aided Design graduates. The percent of respondents either employed or pursuing additional education decreased from 94.1 percent in FY 1997 to 92.6 percent in FY 2002. The total percent of respondents employed increased from 97.3 percent in FY 1997 to 85.7 percent in FY 2002. The total percent of respondents pursuing additional education and not employed decreased from 5.2 percent in FY 1997 to 4.0 percent in FY 2002. The percent of respondents unemployed and seeking employment increased from 5.4 percent in FY 1997 to 6.7 percent in FY 2002. The percent of respondents working within their respective community college district increased from 52.6 percent in FY 1997 to 68.2 percent in FY 2002.

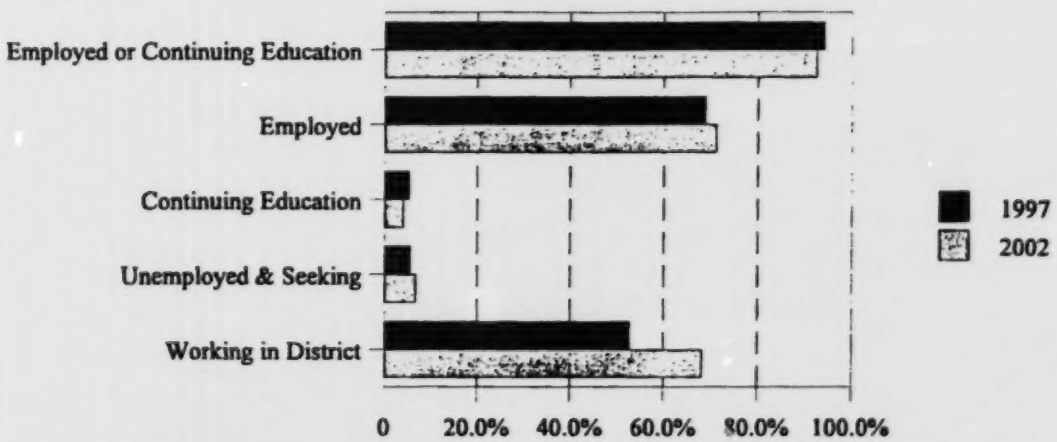

Figure 5. Computer-Aided Design: FY 1997 & 2002

Bottom Line – In Illinois, Computer-Aided Design programs lead to work in drafting and/or graphic design, both of which are considered medium sized occupational fields. Employment opportunities in drafting are expected to decline, while employment in graphic design is expected to increase faster than average through 2008 in Illinois. Average wages for FY 2002 Computer-Aided Design graduates from Illinois community colleges were lower than both drafting and graphic design median wages. However, job satisfaction of graduates from this program was among the highest of all programs studied in FY 2002.

Overall, the employment of interior designers is expected to grow faster than average through the year 2010 (*Occupational Outlook Handbook*, 2002-2003).

Home Furnishings and Equipment Installers and Consultants, General

Students graduating from Home Furnishings and Equipment Installers programs are prepared for a variety of positions that improve the quality of life related to interior spaces and functional environments. These positions range from interior design consultation with clients and architects in planning functional and aesthetic interiors to sales of furniture, lighting, window treatment, art work, interior finishes, and accessories. Interior designers plan the space and furnish the interiors of private homes, public buildings, and business or institutional facilities, such as offices, restaurants, retail establishments, hospitals, hotels, and theaters. They also plan the interiors when existing structures are renovated or expanded. With a client's tastes, needs, and budget in mind, interior designers prepare drawings and specifications for non-load bearing interior construction, furnishings, lighting, and finishes. Increasingly, designers use computers to plan layouts, which can easily be changed to include ideas received from the client. Interior designers also design lighting and architectural details—such as crown molding, built-in bookshelves, or cabinets—coordinate colors, and select furniture, floor coverings, and window treatments (*Occupational Outlook Handbook*, 2002-2003).

Interior design is the only design field subject to government regulation. According to the American Society for Interior Designers, 19 States and the District of Columbia require interior designers to be licensed or registered. Passing the National Council for Interior Design qualification examination is required for licensure. A bachelor's degree is required for most entry-level design positions and graduates of 2-year programs normally qualify as assistants to designers. Beginning designers usually receive on-the-job training, and normally need 1 to 3 years of training before they can advance to higher-level positions.

Most salaried interior designers work for furniture and home furnishings stores, interior designing services, and architectural firms. Others are self-employed and do freelance work—full time or part time—in addition to a salaried job in another occupation. About 46,000 interior designers were employed in 2000. Overall, the employment of designers is expected to grow faster than the average for all occupations through the year 2010. Rising demand for professional design of private homes, offices, restaurants and other retail establishments, and institutions that care for the rapidly growing elderly population should spur employment growth of interior designers. According to *America's Career InfoNet* (2003), 2001 median annual income for interior designers was $42,400 ($20.38 per hour) in Illinois and $39,600 ($19.04 per hour) nationally. FY 2002 Illinois community college graduates from Home Furnishings and Equipment Installers and Consultants programs earned an average hourly salary of $14.41 ($29,973 annually).

During FY 2002 six Illinois community colleges graduated a total of 40 students from Home Furnishings and Equipment Installers and Consultants, General programs. Of these graduates, 75 percent (N=30) responded to the follow-up survey. Survey results indicate that 89.7 percent (N=26) of responding program graduates reported being employed either full- or part-time, while only 3.4 percent reported being unemployed and seeking employment. Of the employed graduates, 73.1 percent (N=19) reported being employed full-time and 26.9 percent (N=7) reported being employed part-time. Fifty percent (N=13) of employed respondents reported being employed within their

respective Illinois community college district, while 50.0 percent (N=13) reported being employed either out-of-district or out-of-state. Of the employed graduates, 80.8 percent (N=21) reported being employed in a related field, while 19.2 percent (N=5) reported being employed in an unrelated field. Approximately 66.7 percent of responding Home Furnishings and Equipment Installers and Consultants, general program graduates working in a related field reported being satisfied with their jobs, the second lowest job satisfaction percentage of all FY 2002 programs studied.

Figure 6 compares Follow-up Study results from FY 1997 and 2002 Home Furnishing graduates. The percent of respondents either employed or pursuing additional education increased from 85.3 percent in FY 1997 to 89.7 percent in FY 2002. The total percent of respondents employed decreased slightly, from 89.2 percent in FY 1997 to 88.9 percent in FY 2002. The percent of respondents pursuing additional education and not employed decreased from 6.9 percent in FY 1997 to 0.0 percent in FY 2002. The percent of respondents unemployed and seeking employment decreased from 5.4 percent in FY 1997 to 3.4 percent in FY 2002. The percent of respondents working within their respective community college district decreased from 60.0 percent in FY 1997 to 50.0 percent in FY 2002.

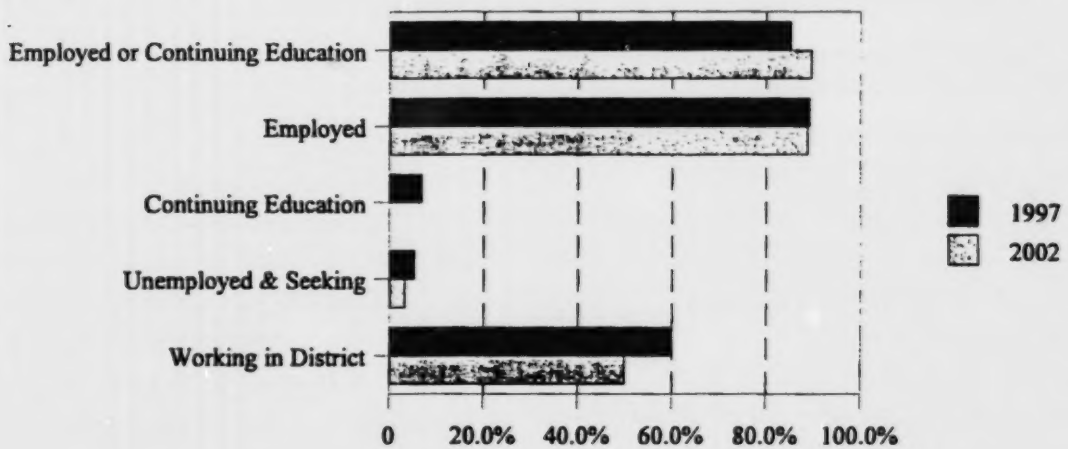

Figure 6. Home Furnishings & Equipment Installers & Consultants, General: FY 1997 & 2002

Bottom Line – Interior design is a small occupational field with six Illinois community colleges graduating students from programs of study in this field in FY 2002. Graduates of 2-year programs normally qualify as assistants to designers and then receive 1-3 years of on-the-job training before advancing. Overall, the employment of designers is expected to grow faster than the average for all occupations through the year 2010. Average wages for FY 2002 Home Furnishings and Equipment Installers and Consultants, General program graduates was below both Illinois and National median wages and job satisfaction was the second lowest percentage of all FY 2002 programs studied.

The employment of library assistants and bookmobile drivers in Illinois is expected to increase about as fast as average through 2008 (*Bureau of Labor Statistics*, 2003).

Library Assistant

Library Assistant graduates are prepared to work in either public or technical services. Library assistants in public services answer questions about the library and help people find information. In technical services, they prepare materials for use. Library assistants and bookmobile drivers organize and lend library materials. Library assistants and bookmobile drivers help people borrow materials from the library. They record information from the borrower and issue a library card. They help people find library materials. These may include books, magazines, videotapes, or other materials. Library assistants use computers to prepare, store, and retrieve information. They maintain records of library items and file catalog cards. They classify and catalog items according to their contents and purpose. They review records to find titles of overdue materials and to identify the borrowers. They enter and update patrons' records using a computer database. Library assistants operate and maintain audio-visual equipment. They explain how to use reference equipment and computerized databases.

In Illinois, this is a medium-sized occupation. About 8,870 library assistants and bookmobile drivers are employed in the state. Nationally, about 98,300 library assistants and bookmobile drivers work in this small occupation. The employment of library assistants and bookmobile drivers in Illinois is expected to increase about as fast as average through 2008. About 510 job openings are expected each year. According to the Illinois Department of Employment Security, the short-term forecast for library assistants and bookmobile drivers through the year 2003 is favorable. Nationally, the number of jobs for library assistants and bookmobile drivers is expected to grow as fast as average through the year 2010. Many openings will become available to replace workers who leave the field. Turnover is high because the pay is low and full-time jobs are rare. Institutions may hire library assistants rather than librarians to keep costs down. Jobs also may be affected by budget cuts (http://stats.bls.gov/search/ooh.asp?ct=OOH).

In Illinois, the median wage for library assistants and bookmobile drivers is $1,450 per month ($8.35 per hour). Nationally, the median wage for library assistants and bookmobile drivers is $1,500 per month ($8.65 per hour). Half of all library assistants and bookmobile drivers earn between $1,175 and $1,950 per month ($6.80 and $11.25 per hour). Wages vary by area of the country and employer. The assistant's level of experience and responsibility also affect wages.

Five Illinois community colleges graduated 56 students in this program area. Slightly over 64 percent of the former students (N=36) provided responses to the graduate surveys. Nearly eighty-nine percent of these graduates were either employed or continuing their education or both and there were no graduates reporting that they were unemployed and seeking employment. A relatively large proportion (83.9 percent, N=26) of the employed graduates were working in a training-related job. *HORIZONS 1999* reports that many library assistants are trained on the job. This correlates with the fact that over 77 percent of employed respondents secured their job either prior to or during their community college training.

Even though graduates in Library Assistant programs had the second lowest average salary of all the programs in the study, at an average $11.31 per hour or $23,524.80 per year for full-time

employment, this wage is higher than the average annual salary of $20,410 reported by a 2001 Bureau of Labor Statistics survey for Illinois for this field. All of the working respondents were employed in Illinois, however, less than half (N=15) were employed in the district. Job satisfaction ratings of graduates in this program were *among the highest* (96.2 percent) in the 2003 study. Graduates were also satisfied with the major components of the Library Assistant program offered at their college, as well as the services provided during their training (90.6 percent and 92.0 percent, respectively).

Figure 7 contains comparative data from the FY 1997 and FY 2002 Library Assistant graduates. Outcomes were generally positive for both groups of graduates, although more so for the 1997 group. The earlier graduates had a higher rate of those employed or continuing education or both (95.0 versus 88.9 percent) and those employed (90.2 versus 86.1 percent). Those in the 1997 group were much more likely to find employment in the district where they received their training (78.4 versus 48.4 percent). On a very positive note, both groups of graduates had a 0 percent unemployment rate.

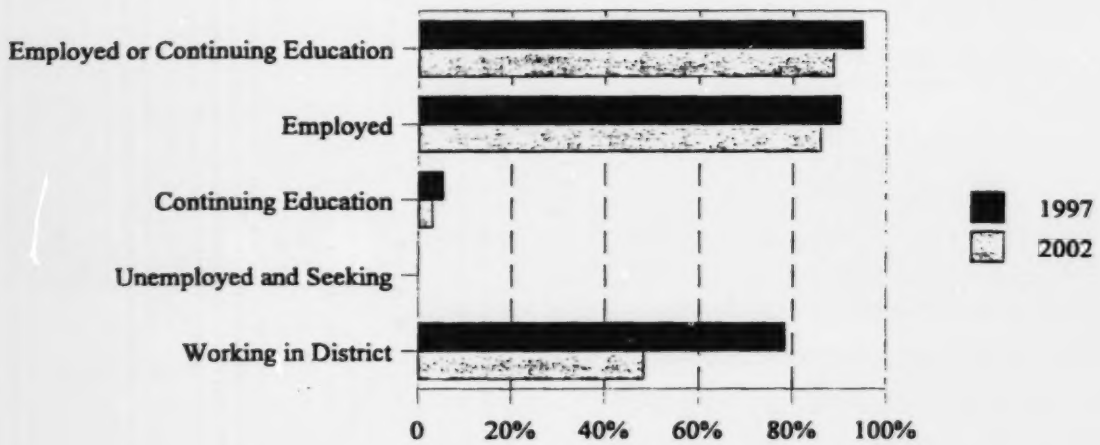

Figure 7. Library Assistant Graduates: FY 1997 & FY 2002

Bottom Line – Nearly nine out of ten Library Assistant graduates were employed, continuing education, or both. Nearly eighty-four percent of the employed Library Assistant graduates were working in a related field – this is significantly higher than the average of 72.6 percent for all graduates in the study. The unemployment rate for these graduates was 0 percent. Earnings for full-time workers, although competitive for their field at $11.31/hour, were substantially lower than the average for all the graduates in the study. Library Assistant graduates working in a related field were very satisfied with their positions (96.2 percent). Although outcomes for current Library Assistant graduates were relatively favorable, the outcomes for the earlier group were more positive. Average growth is expected in this field through 2008.

Job prospects for highly skilled Heating, Air Conditioning, & Refrigeration technicians are expected to be very good, particularly for those with technical school or formal apprenticeship training. (*Occupational Outlook Quarterly*, Spring 1998)

Heating, Air Conditioning, & Refrigeration Mechanics and Repairers

Heating and cooling system mechanics install and repair heating, air-conditioning, and refrigeration systems. Heating system mechanics install oil, gas, electric, and other types of heating units. They often refer to blueprints and manufacturers' specifications as they work. After putting the equipment in place, they cut or drill holes in floors, walls, and roofs for air ducts. Mechanics may also assemble the ductwork. Next, they install fuel and water lines, pumps, ducts, and vents. Then they connect the electrical wiring and controls. Finally, they check the unit for proper operation.

Heating system mechanics also maintain and repair these systems. For example, they service and adjust burners and blowers on a regular basis. They clean and oil parts, replace filters, and clean vents and ducts that have collected dust. If the system is not operating properly, mechanics check thermostats, nozzles, and controls to diagnose the problem. Cooling system mechanics install air-conditioning and refrigeration units. To set up these systems, mechanics install motors, compressors, piping, and many other components. Then they connect the equipment to the ductwork and refrigerant lines. The ductwork often is the same used for heating systems and is already there. Mechanics connect the equipment to the electrical source. Finally, they charge the system with refrigerant and check its operation. They also set or program the controls.

In Illinois, the median wage for heating and cooling system mechanics is $3,250 per month ($18.75 per hour). Nationally, the median wage for heating and cooling system mechanics is $2,730 per month ($15.75 per hour). Half of all heating and cooling system mechanics earn between $2,125 and $3,455 per month ($12.25 and $19.90 per hour). Apprentices usually begin at about half of the wage rate paid to experienced mechanics. As they gain experience and improve their skill, apprentices receive wage increases. Wages vary depending on the employer and the area of the country. Most heating and cooling system mechanics receive benefits. These include paid vacation, sick leave, and health insurance. Some employers also pay for work-related training and provide uniforms, company vans, and tools. Self-employed mechanics must provide their own benefits.

In Illinois, this is a medium-sized occupation. About 10,480 heating and cooling system mechanics are employed in the state. Nationally, about 243,100 heating and cooling system mechanics work in this medium-sized occupation. More than one third of these work for heating and cooling contractors. In Illinois, employment of heating and cooling system mechanics is expected to increase about as fast as average through 2008. About 370 job openings are expected each year. According to the Illinois Department of Employment Security, the short-term forecast for heating and cooling system mechanics through the year 2003 is very unfavorable. Nationally, the number of jobs for heating and cooling system mechanics is expected to increase faster than average through the year 2010.

This is a popular program, offered by 21 community colleges in Illinois. College of DuPage (N= 18), College of Lake County (N= 18), Harper College (N= 15), and Southwestern College (N= 15) were among the colleges with the largest number of respondents. Of the 272 fiscal year 2002 graduates,

153 (56.3 percent) provided responses to the spring 2003 college surveys. Nearly 87 percent of the graduates (N=133) were employed. More than four-out-of five (N=108) of the respondents were employed in a heating and air conditioning-related job. The average wage ($18.05 per hour, about $37,544 annually) for those who reported full-time employment was higher than four-fifths of the other programs in the 2003 study. The earnings for this group of graduates is competitive with the state median of $18.75/hour for workers in this field and is substantially higher than the national average of $15.75 per hour. Since 1997 there has been an increase in salary of approximately 17.1 percent ($15.41 in 1997; $18.05 in 2002). Heating and Cooling System graduates who were working in a related position were fairly satisfied with their jobs (92.5 percent). The overall satisfaction level for the program components (88.5 percent) was about average in comparison to the average for all completers in the study. Compared to other graduates in the study, Heating and Cooling System graduates were very satisfied with college service programs (90.1 percent).

Figure 8 illustrates that outcomes were similar among 2002 and 1997 completers with earlier graduates having slightly better results. The graphic illustrates that 1997 graduates had a higher rate of those employed (91.2 percent for 1997 versus 86.9 percent for 2002). In addition, the 1997 graduates were less likely to be unemployed (5.0 percent for 1997 versus 7.8 percent for 2002). The rate of those employed, continuing education or both was slightly higher for 2002 graduates (94.0 percent for 2002 versus 93.7 percent for 1997). The more recent graduates that found employment were more likely to remain in the district where they receive their training (69.6 percent for 2002 versus 58.9 percent for 1997). The most recent graduates were more likely to be unemployed, but continuing their education (7.8 percent for 2002 versus 2.3 percent for 1997).

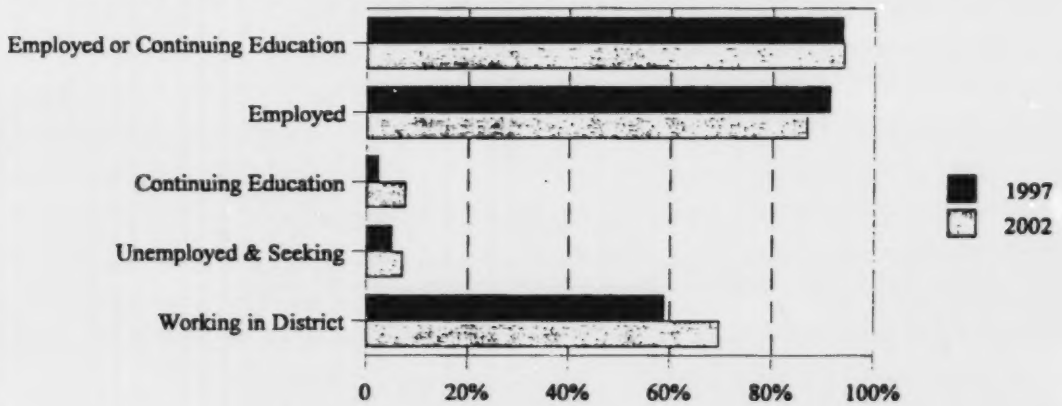

Figure 8. Heating, Air Conditioning, and Refrigeration Mechanics and Repairers Graduates: FY 1997 & 2002

Bottom Line – Overall results were very positive for Heating and Cooling System graduates. Exactly 94 percent of these graduates were employed, pursuing further education, or both. Nearly 87 percent of the graduates were exclusively employed. More than eight out of every ten graduates were employed in a related field. The unemployment rate among Heating and Cooling System graduates was 7.8 percent compared to 10.4 percent for all programs in the study. Earnings for full-time workers were competitive with the field at $18.05 per hour. Heating and Cooling System graduates

working in a related field were very satisfied with their positions at 92.5 percent. Overall, graduates were highly satisfied with their program components (90.9 percent). Graduates reported a 90.1 percent level of satisfaction with their college services compared to the overall average of 83.2 percent. Outcomes for current Heating and Cooling System graduates were slightly less favorable than those from five years ago.

Drafting

Employment of drafters is expected to grow about as fast as average for all occupations through 2010 (*Bureau of Labor Statistics*, 2003).

Drafters make detailed drawings of objects that will be manufactured or built. Drafters prepare technical drawings. Production and construction workers follow these drawings to build everything from radios to office buildings. These drawings show the technical details of the products and structures from all sides. They also include exact dimensions, specific materials to be used, and procedures to be followed. Drafters meet with engineers, architects, and other people who need the technical drawings. From these meetings, drafters learn details about the project or item that will be built. Drafters may receive calculations and rough drawings from clients at these meetings. Drafters take the rough information and turn it into sketches or scale drawings. They use their own knowledge of the field to fill in some of the details on drawings.

Employment of drafters is expected to grow about as fast as average for all occupations through 2010 (*Bureau of Labor Statistics*, http://stats.bls.gov/). Industrial growth and increasingly complex design problems associated with new products and manufacturing processes will increase the demand for drafting services.

Two community college system drafting programs included in this report are:

Program Area	CIP Code
Architectural Drafting	480102
Mechanical Drafting	480105

Architectural Drafting

Prospective architects who gain career-related experience in an architectural firm while in school and who know CADD technology (especially that which conforms to the new national standards) will have a distinct advantage in obtaining an intern-architect position after graduation (*Occupational Outlook Handbook*, 2002-2003).

Architectural drafters draw architectural and structural features of buildings and other structures. They may specialize by the type of structure, such as residential or commercial, or by material used, such as reinforced concrete, masonry, steel or timber. Students electing to pursue education in Architectural Drafting may do so at 12 Illinois community colleges. Slightly more than one-half (52.6 percent, N=30) of the fiscal year 2002 Architectural Drafting graduates replied to survey questions. At the time of the survey, nearly 90 percent of the graduates were either pursuing further education, employed, or both. A relatively high percentage (17.2 percent (N= 5) reported unemployment. Twenty-one (87.5 percent) of the 24 working drafters were employed full-time. However, only 65.2 percent (N=13) employed graduates were working in a field related to

architectural drafting. This is below the average (72.6 percent) for all graduates in the study. When asked why their job is not in a related field, respondents provided a variety of reasons, with no particular consistent determining factor cited. Nearly 96 percent of the employed graduates were working in Illinois, with 69.6 percent (N=16) working within the community college district.

Average full-time wages were reported at $14.31 per hour ($29,765 per year), lower than the overall average of $15.33 per hour for the study. Average full-time wages for Architectural drafters in this study was also below the national median of $16.93 per hour in 2000 and the Illinois average of $15.92 per hour (*Occupational Outlook Handbook*, 2002-2003). Those graduates employed in the Architectural drafting field had a lower satisfaction rating (78.6 percent) with their jobs than most other graduates. Satisfaction ratings for with the overall major program components at the colleges were slightly below the average for the study (87.6 percent versus 88.6 percent). Job preparation (75.0 percent) and preparation for further education (82.1 percent) were the specific components which had lower satisfaction ratings. Architectural drafting graduates were slightly more satisfied (85.3 percent) with the services provided by the colleges than other completers in the study (83.2 percent).

When the fiscal year 2002 Architectural Drafting graduates are compared to1997 respondents in the same program, data indicate that a lower percentage were employed continuing education or both (89.3 percent versus 96.8 percent). However, the more recent graduates had a higher percentage of those employed (82.8 percent versus 67.7 percent). More graduates were continuing their education in the 1997 study (30.0 percent versus 8.0 percent). The earlier graduates were more likely to find employment within their community college district (81.0 percent) than the recent completers (69.6 percent). The earlier graduates had a much lower unemployment rate than the 2002 completers (3.2 percent versus 17.2 percent).

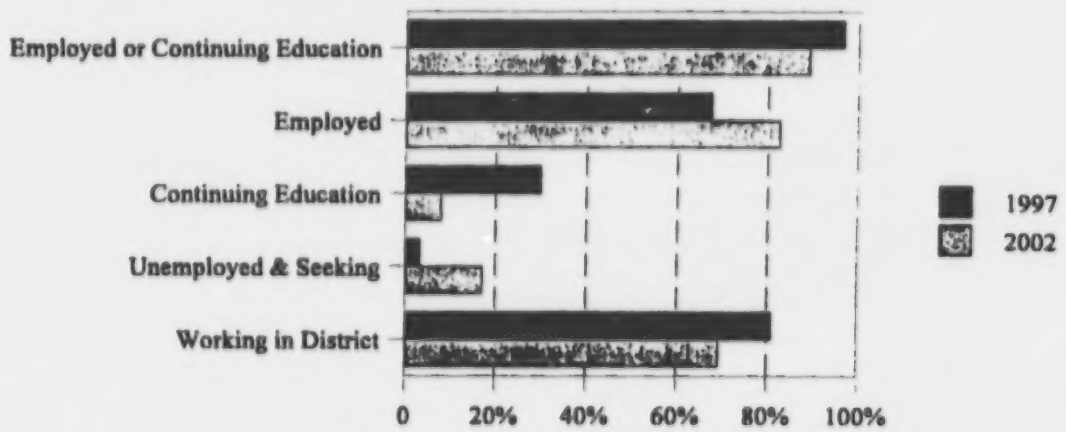

Figure 9. Architectural Drafting Graduates, FY 1997 & 2002.

Bottom Line – A number of graduates in this field indicated an inability to locate related employment (N = 8). Slightly over 89 percent of Architectural Drafting graduates were employed, pursuing further education, or both. A relatively low percentage of the graduates were exclusively employed (56.0 percent). The unemployment rate among Architectural Drafting graduates was 17.2 percent which is among the highest for all the programs in the study. Earnings for full-time workers

were below the average for Illinois as well as the national median. Job satisfaction for those employed in a related field was below the average for the study (78.6 percent versus 86.1 percent).

Employers are most interested in applicants who have well-developed drafting and mechanical drawing skills; a knowledge of drafting standards, mathematics, science, and engineering technology (*Occupational Outlook Handbook*, 2002-2003).

Mechanical Drafting

Mechanical Drafters prepare detail and assembly drawings of a wide variety of machinery and mechanical devices, indicating dimensions, fastening methods, and other requirements. Eight community colleges provided programs in this area and produced 36 graduates in fiscal year 2002. A high percentage (30 out of 36; 83.3 percent) of the fiscal year 2002 Mechanical Drafting graduates replied to survey questions. At the time of the survey, more than 96 percent of the graduates were either pursuing further education, employed, or both. This is the highest percentage for all graduates in the study. A relatively low percentage (3.4 percent (N= 1) reported unemployment. Twenty-four (88.9 percent) of the 27 working drafters were employed full-time. Over 70 percent (N=19) of employed graduates were working in a field related to mechanical drafting. This is below the average (72.6 percent) for all graduates in the study. When asked why their job is not in a related field, respondents provided a variety of reasons, with no particular consistent determining factor cited. A relatively high 11.1 percent of the employed graduates were working outside of Illinois, with only 63.0 percent (N=17) working within the community college district.

At $14.10 per hour ($29,328 per year), the full-time employed drafting graduates earned less than the average reported for all full-time workers ($15.33) in the 2002 study. The *2002-2003 Occupational Outlook Handbook* reports that the national median hourly rate of mechanical drafters who worked year round, full-time was about $18.19 in 2000. In Illinois the average earnings per hour was $18.51. Those graduates employed in the Architectural drafting field had a slightly lower satisfaction rating (84.2 percent) with their jobs than most other graduates. Satisfaction ratings for with the overall major program components at the colleges were slightly above the average for the study (90.0 percent versus 88.6 percent). Mechanical drafting graduates were slightly more satisfied (85.6 percent) with the services provided by the colleges than other completers in the study (83.2 percent).

When the fiscal year 2002 Mechanical Drafting graduates are compared to1997 respondents in the same program, data indicate that a lower percentage were employed continuing education or both (96.6 percent versus 100.0 percent). However, the more recent graduates had a higher percentage of those employed (93.1 percent versus 88.0 percent). More graduates were continuing their education in the 1997 study (12.0 percent versus 3.6 percent). The more recent graduates were more likely to find employment within their community college district (63.0 percent) than the earlier completers (57.1 percent). The earlier graduates had a slightly higher unemployment rate than the 2002 completers (4.0 percent versus 3.4 percent).

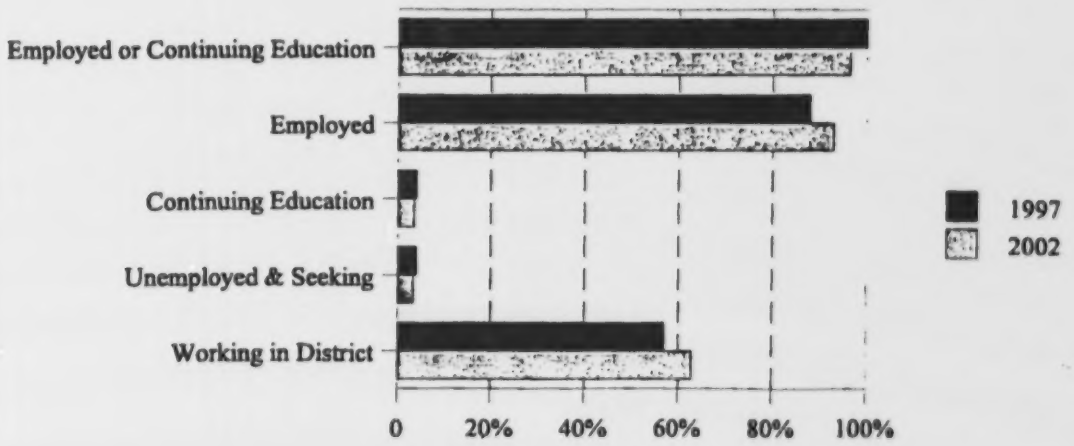

Figure 10. Mechanical Drafting Graduates, FY 1997 & 2002.

Bottom Line – A high percentage (96.6 percent) of Mechanical Drafting graduates were employed, pursuing further education, or both. A relatively low percentage of the graduates were exclusively employed (56.0 percent). The unemployment rate among Mechanical Drafting graduates was 3.4 percent which was well below the average of 10.4 percent for all the graduates in the study. Earnings for full-time workers were below the average for Illinois as well as the national median. Job satisfaction for those employed in a related field was slightly below the average for the study (78.6 percent versus 84.2 percent). Satisfaction with program components and college services were slightly above the average for all graduates in this study.

Employment is projected to decline as the increased use of computers in typesetting and page layout eliminates many prepress jobs (*Bureau of Labor Statistics*, 2003).

Graphic and Printing Equipment Operators

Programs in this broad category include Lithographer and Platemaker, and Desktop Publishing Equipment Operator. (These are known as "prepress" occupations according to the Bureau of Labor Statistics' *Dictionary of Occupational Titles*.) Advances in computer software and printing technology continue to change prepress work. Customers, as well as prepress technicians and workers, use their computers to produce material that looks like the desired finished product. Customers, using their own computers, increasingly do much of the typesetting and page layout work formerly done by prepress technicians and workers. This process, called "desktop publishing," poses new challenges for the printing industry.

Overall employment of prepress technicians and workers is expected to decline through 2010. Demand for printed material should continue to grow, spurred by rising levels of personal income, increasing school enrollments, higher levels of educational attainment, and expanding markets. However, increased use of computers in desktop publishing should eliminate many prepress jobs (http://www.bls.gov/oco/ocos230.htm#outlook).

Two community college system Graphic and Printing Equipment Operator programs included in this report are:

Program Area	CIP Code
Lithographer and Platemaker	480206
Desktop Publishing Equipment Operator	480212

Some new jobs for prepress technicians and workers are expected to emerge in commercial printing establishments. New equipment should reduce the time needed to complete a printing job, and allow commercial printers to make inroads into new markets that require fast turnaround (*Bureau of Labor Statistics*, 2003).

Lithographer and Platemaker

The longest running program in the broad Graphic and Printing Equipment Operators program area is Lithographer and Platemaker. Workers in these occupations use a photographic process to make printing plates. The lithographic printing process requires that images be made up of tiny dots coming together to form a picture. Photographs cannot be printed without them. When normal "continuous-tone" photographs need to be reproduced, halftone camera operators separate the photograph into pictures containing the dots. Color separation photography is more complex. In this process, camera operators produce four-color separation negatives from a continuous-tone color print or transparency. An increasing number of printing companies use lasers to directly convert electronic data to plates. Technical skills for entering, storing, and retrieving information from computer-aided equipment are required (http://www.bls.gov/oco/ocos230.htm).

Lithographic training can be obtained at four colleges in the Illinois Community College System: Triton, Kennedy-King, South Suburban, and Illinois Central. These programs produced 54 graduates in fiscal year 2002, 27 of whom responded to the survey (50.0 percent response rate). Approximately 80 percent (N = 20) of the respondents were employed, continuing their education, or both. Overall, 82.4 percent (N = 14) of the working graduates were employed full-time. Only 47.1 percent of the workers had found employment in the area for which they were trained. Four of the nine graduates indicated that they could not find a job in their field of preparation. With the majority (52.9 percent, N = 9) of graduates beginning their jobs after completion of the program, full-time earnings averaged $15.24 per hour (about $31,699 annually). This compares favorably to the national median hourly earnings of $14.57 in 2000.

Those holding jobs in a field for which they were prepared were satisfied with their employment (87.5 percent). Overall, graduates of the Lithographic training programs were not as satisfied with their major programs components provided at the college during their training (79.4 percent versus the average of 88.6 percent). Satisfaction was especially low for the component of Labor Market Employment Information (61.5 percent). Satisfaction with colleges services for these graduates was also lower than average (79.9 percent versus 83.2 percent). Of the eight college services, Lithographic graduates were least satisfied with academic advising (69.6 percent).

A comparison of the fiscal year 2002 Lithographic training graduates and the 1997 respondents in the same program, indicate that the earlier group of graduates faired more favorably. The fiscal year 2002 graduates had a lower percentage of those employed continuing education or both (80.0 percent versus 100.0 percent). The more recent graduates had a lower percentage of those employed (68.0 percent versus 86.7 percent). More graduates were continuing their education in the 1997 study (27.3 percent versus 15.0 percent). The earlier graduates were less likely to find employment within their community college district (26.9 percent) than the recent completers (64.7 percent). The earlier graduates had a much lower unemployment rate than the 2002 completers (10.0 percent versus 20.0 percent).

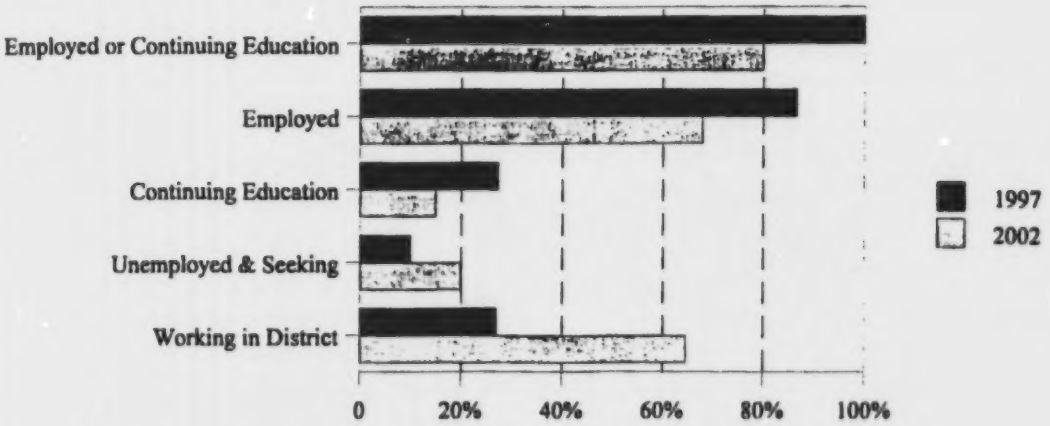

Figure 11. Lithographer and Platemaker Graduates: FY 1997 & 2002

Bottom line – Eighty percent of Lithographic training graduates were either employed, seeking further education or both. This is one of the lowest percentages in the study. Unemployment for graduates in this program was the highest of all the programs (along with Funeral Services and Mortuary Science) in this year's study at 20.0 percent. The rate of those employed was second lowest in the study at 68.0 percent. On a positive note, the hourly rate of $15.28 was near the average of $15.33 for the study. Graduates working in a related field were satisfied with their jobs (87.5 percent). However, satisfaction with the programs they completed and college services were consistently low (79.4 percent for program components and 79.9 percent for services).

Employment of desktop publishers is expected to grow much faster than average for all occupations through 2010, as more page layout and design work is performed in-house using computers and sophisticated publishing software (*Bureau of Labor Statistics,* 2003).

Desktop Publishing Equipment Operators

Using computer software, desktop publishers format and combine text, numerical data, photographs, charts, and other visual graphic elements to produce publication-ready material. Depending on the nature of a particular project, desktop publishers may write and edit text, create graphics to accompany text, convert photographs and drawings into digital images and then manipulate those images, design page layouts, create proposals, develop presentations and advertising campaigns, typeset and do color separation, and translate electronic information onto film or other traditional forms. Materials produced by desktop

publishers include books, business cards, calendars, magazines, newsletters and newspapers, packaging, slides, and tickets. As companies have brought the production of marketing, promotional, and other kinds of materials in-house, they increasingly have employed people who can produce such materials (http://www.bls.gov/oco/ocos276.htm).

Desktop Publishing Equipment Operator programs are offered at 13 institutions. The most popular of the graphics and printing programs, these programs produced 103 graduates in fiscal year 2002. Sixty-five percent (N=67) returned follow-up information to the colleges. Nearly eighty percent (N=53) of the respondents were employed, continuing their education, or both. Of working graduates, just over 65 percent were working full-time. Eighteen (38.3 percent) of the workers had not found employment in the area for which they were trained. Two-thirds of these graduates indicated that they could not find a job in their field of preparation (N=12). With the majority (73.5 percent, N=36) of graduates beginning their jobs either during program enrollment or after completion of the program, full-time earnings averaged $12.40 per hour (about $25,700 annually. Nationally, earnings for desktop publishers vary according to level of experience, training, location, and size of firm. Median annual earnings of desktop publishers were $30,600 ($14.71 per hour) in 2000. The middle 50 percent earned between $22,890 and $40,210. The lowest 10 percent earned less than $17,800, and the highest 10 percent earned more than $50,920 a year (http://www.bls.gov/oco/ocos276.htm#earnings).

Nearly 83 percent of those holding jobs in a field for which they were prepared were satisfied with their employment. Overall, graduates of the Desktop Publishing Equipment Operator training programs were not as satisfied with their major programs components provided at the college during their training as other graduates in the study (86.7 percent versus the average of 88.6 percent). Satisfaction was especially low for the component of Labor Market Employment Information (63.6 percent). Satisfaction with colleges services for these graduates was slightly lower than average (81.5 percent versus 83.2 percent). Of the eight college services, Desktop Publishing graduates were least satisfied with career planning (64.1 percent).

A comparison of the fiscal year 2002 Desktop Publishing Equipment Operator graduates and the 1997 respondents in the same program, indicate that the earlier group of graduates had more favorable results. The fiscal year 2002 graduates had a lower percentage of those employed continuing education or both (79.1 percent versus 87.0 percent). In terms of percentage of those employed, the more recent graduates had a lower rate (73.1 percent versus 86.7 percent). More graduates were continuing their education in the 2002 study (7.5 percent versus 2.1 percent). The earlier graduates were much less likely to find employment within their community college district (58.0 percent) than the recent completers (81.6 percent). The earlier graduates also had a much lower unemployment rate than the 2002 graduates (6.7 percent versus 13.4 percent).

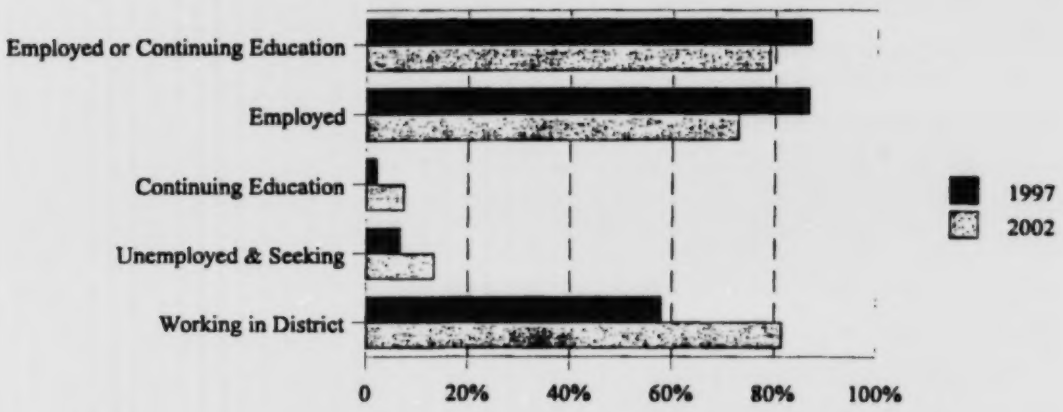

Figure 12. Desktop Publishing Equipment Operator Graduates: FY 1997 & 2002

Bottom line – Eighty percent of Lithographic training graduates were either employed, seeking further education or both. This is one of the second lowest percentages in the study. Unemployment for graduates in this program (13.4 percent) was higher than the average of 10.4 percent for all the programs. The rate of those employed was relatively low at 73.1 percent. The hourly rate of $12.40 for full-time workers was the third lowest in the study. Satisfaction ratings for employment, college services, and program components were consistently below the averages of the study. On a positive note, Desktop Publishing Equipment Operator graduates who found employment tend to work within the district where they received their training (81.6 percent).

In Illinois, employment of metal and plastic processing workers is expected to increase more slowly than average through 2008 (*Career Information System*, 2003).

Precision Metal Workers

The Precision Metal Workers program category encompasses a broad spectrum of individual programs. Precision metal and plastic processing workers make most of the products we rely on every day. These workers can be grouped into two main categories. Set-up workers prepare machines and set and adjust the controls. Operators and tenders load and monitor the machines as they operate. The set-up process requires an understanding of the whole production process. Thus, set-up operators need more training and skills than operators and tenders. Precision metal workers are usually identified by the type of machine they operate. Grinders operate machines that grind extra material off of metal products. Extruding machine operators use machines that force metal through small holes to make wire. Some precision metal workers specialize in one or two types of machines. Many are trained to set up or operate a variety of machines, however (*Occupational Outlook Handbook*, 2003).

Wages vary based on the size of the company, the industry, and the type of machine operated. Workers earn higher wages for working with more complex machines. The skill level and experience of the operator also affect wages. In addition, workers who are members of a union usually receive

higher wages. Approximately one-third of metal and plastic processing workers are union members, about double the rate for other workers in the economy. Metalworking industries have a higher rate of unionization than does the plastics industry. Certification is optional for metal and plastic processing workers. The National Institute for Metalworking Skills has developed standards for metalworking machine operators. Applicants must take a course and pass a written exam.

In Illinois, metal and plastic processing workers is a very large occupation. About 106,180 metal and plastic processing workers are employed in the state. Nationally, about 1,324,600 metal and plastic processing workers are employed in this large occupation. In Illinois, employment of metal and plastic processing workers is expected to increase more slowly than average through 2008. About 2,180 job openings are expected each year. According to the Illinois Department of Employment Security, the short-term forecast for metal and plastic processing workers through the year 2003 is very unfavorable. Nationally, the overall number of jobs for metal and plastic processing machine operators will grow more slowly than average through the year 2010.

Five Precision Metal Workers programs included in this report are:

Program Area	CIP Code
Machinist/Machine Technologist	480501
Machine Shop Assistant	480503
Sheet Metal Worker	480506
Tool and Die Maker/Technologist	480507
Welder/Welding Technologist	480508

Employment of machinists in Illinois is expected to increase more slowly than average through 2010 (*Career Information System*, 2003).

Machinist/Machine Technologist

Machinists operate machine tools such as lathes, drill presses, and milling machines. They use their knowledge of metal and tools to make products that are precise sizes and shapes. For example, they make parts for industrial machines, aircraft, cars, or other products. Some machinists make large quantities of one part, especially very precise parts. Others produce small batches or one-of-a-kind items (*Career Information System*, 2003 and *Occupational Outlook Handbook*, 2002-03).

Employment of machinists in Illinois is expected to increase more slowly than average through 2010. About 530 job openings are expected each year. Most of these openings will occur from the need to replace workers who transfer to other occupations or leave the workforce. Nationally, the number of jobs for machinists is expected to increase more slowly than average through the year 2010 (*Career Information System*, 2003).

The response rate of Machinist/Machine Technologist graduates was 36.1 percent with 13 of 36 completers responding. Due to the small number of respondents caution should be used in generalizing from the results of the survey. Southwestern Illinois College was the only college with Machinist/Machine Technologist graduates. Eleven graduates were exclusively employed. No

graduates were employed and pursuing further education One completer was unemployed and seeking employment while another graduate was unemployed but not seeking employment.

Ten of the eleven working graduates from Machinist/Machine Technologist programs were employed in a related field. The individual not working in a related field did not indicate the reason for working in an unrelated field. Nine of the graduates working in a related field reported a fairly low satisfaction level of 55.6 percent.

Ten Machinist/Machine Technologist graduates acquired their jobs prior to program entrance or during program enrollment. No graduates began employment after program completion. Ten graduates found employment within their college's district. One graduate was employed out of the state. All of the Machinist/Machine Technologist graduates were satisfied with their program components and services.

Based on eight responses, the average salary for Machinist/Machine Technologist program graduates working full-time was $23.57 per hour or $49,026 annually. No information was available for part-time graduates. According to the *Career Information System* (2003), the median wage for machinists in Illinois is $2,620 per month ($15.10 per hour). Nationally, the median wage for machinists is $2,670 per month ($15.43 per hour).

Figure 13 contains comparative information for Machinist/Machine Technologist graduates from fiscal year 2002 and fiscal year 1997. Outcomes were slightly more positive for fiscal year 1997 graduates. Graduates in fiscal year 1997 had a lower unemployment rate than their counterparts from fiscal year 2002 (0.0 percent in fiscal year 1997 compared to 7.7 percent in fiscal year 2002). Although comparable, graduates from fiscal year 1997 exhibited slightly higher levels of being exclusively employed. Graduates from fiscal year 2002 were more likely to be employed within the district where they were trained.

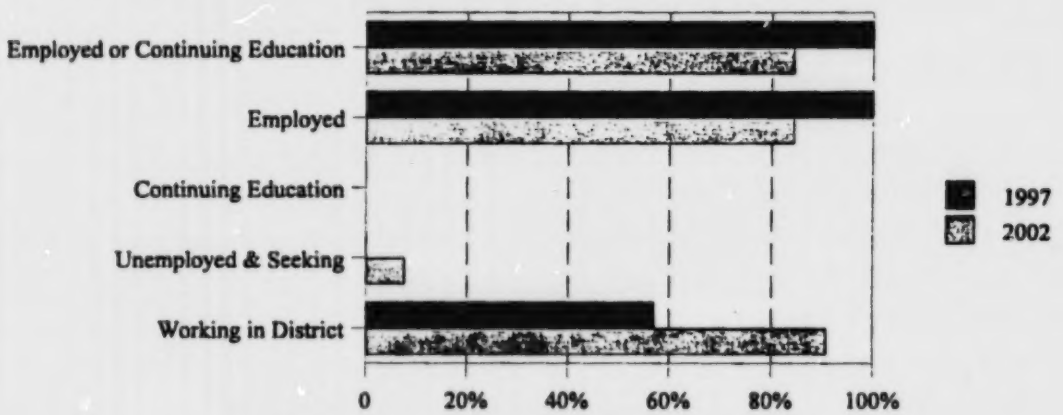

Figure 13. Machinist/Machine Technologist: FY 1997 & 2002

Bottom Line – Overall results were generally positive for Machinist/Machine Technologist graduates. Almost 85 percent of Machinist/Machine Technologist completers were exclusively employed. Ten of the eleven working graduates were employed in a field related to their area of

study. The unemployment rate among Machinist/Machine Technologist graduates was 7.7 percent compared to 0 percent in fiscal year 1997. Earnings for full-time workers were high compared with the field at $23.57 per hour. Machinist/Machine Technologist graduates working in a related field had a low level of satisfaction with their positions at 55.6 percent. Overall, graduates were highly satisfied (100 percent satisfaction level) with the components and services in their programs.

Employment of machine shop assistants is expected to grow more slowly than the average for all occupations over the 2000-10 period because of rising productivity among machinists (*Bureau of Labor Statistics*, 2003).

Machine Shop Assistant

Machine shop assistant programs prepare graduates for entry level employment in jobs such as machinist, tool and die maker, etc. Machinists use machine tools to produce precision metal parts. They operate machine tools such as lathes, drill presses, and milling machines. They use their knowledge of metal and tools to make products that are precise sizes and shapes. For example, they make parts for industrial machines, aircraft, cars, or other products. Some machinists make large quantities of one part, especially very precise parts. Others produce small batches or one-of-a-kind items (http://www.bls.gov/ oco/ocos223.htm). Certification for machinists is optional. However, it certifies that a machinist has certain skills and may help with hiring or advancement. Certification is offered by the National Institute of Metalworking skills (NIMS). To obtain certification, machinists must:

- Complete a college program than incorporates NIMS standards;
- Pass a performance requirement; and
- Pass a written exam.

In the community colleges, Machine Shop Assistant programs trained 91 graduates in fiscal year 2002. Sixty-one (67.0 percent) of these former students responded to the follow-up survey. Nearly nine out of ten (89.7 percent) of these graduates were employed, continuing their education, or both. Nearly 82 percent of the graduates were employed. Of those that were employed almost all (98.0 percent) were working full-time. The unemployment rate for Machine Shop Assistant graduates (11.7 percent) was near the overall average of 10.4 percent for all graduates in the study. Over thirty percent (N=15) were employed in a field unrelated to their field of preparation. The reason for this situation was most often cited as "could not find a job in field of preparation".

Although they earned more than the average hourly wage for all survey respondents, machine shop assistant graduates reported an average wage ($16.00 per hour) that was lower than the average of all precision metal workers program graduates. Nationally, median hourly earnings of machinists were $14.78 in 2000. The middle 50 percent earned between $11.43 and $18.39. In Illinois, the median wage for machinists is $2,620 per month ($15.10 per hour). Machine Shop Assistant graduates who were working in a related field were not as satisfied with their jobs (79.4 percent) as most other graduates (overall average = 86.1 percent). These graduates were moderately satisfied with major program components (87.1 percent), but less satisfied with college services (77.3 percent).

Figure 14 contains comparative data from the FY 1997 and FY 2002 Machine Shop Assistant graduates. Outcomes were generally more positive for the earlier groups of graduates. The earlier graduates had a higher rate of those employed or continuing education or both (96.2 versus 89.7 percent) and those employed (96.5 versus 81.7 percent). Those in the 1997 group were more likely to find employment in the district where they received their training (61.8 versus 53.2 percent). The unemployment rate for the 1997 graduates was much lower than that of the more recent group (1.8 percent versus 11.7 percent).

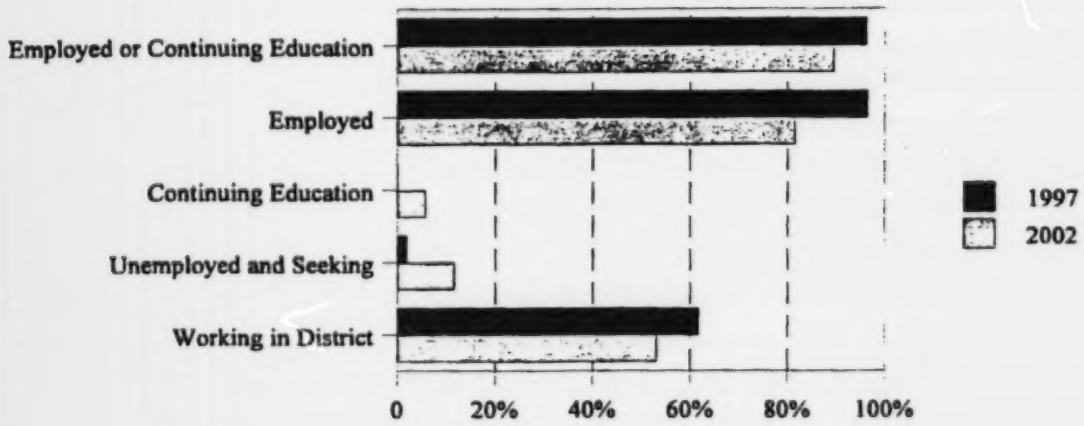

Figure 14. Machine Shop Assistant: FY 1997 & FY 2002

Bottom Line – Nearly nine out of ten Machine Shop Assistant graduates were employed, continuing education, or both. Almost eighty-two percent of the Machine Shop Assistant graduates were employed. Ninety-eight percent of the graduates employed were working full-time. The unemployment rate for these graduates was fairly high at 11.7 percent. Earnings for full-time workers, were competitive for their field at $16.00/hour, and were slightly above the average for all the graduates in the study.

In Illinois, employment of sheet metal workers is expected to increase about as fast as average through 2008 (*Career Information System*, 2003).

Sheet Metal Worker

Sheet metal workers make and install metal building parts and products. They also build products used in construction. They make and install many types of duct systems. They build roofs, siding, rain gutters, restaurant equipment, and many products made from metal sheets. They may also work with fiberglass or plastic materials. Some sheet metal workers specialize in fabrication, installation, or maintenance, but most do all three jobs. They usually fabricate their products at a shop away from the construction site, then take the parts to the construction site, where they further assemble the pieces as they install them. Some jobs are done completely at the job site, however, and some sheet metal workers specialize in maintaining existing cooling and ventilation systems (*Career Information Systems*, 2003).

In Illinois, this medium-sized occupation employs about 10,970 people. Nationally, about 224,000 people work in this medium-sized occupation. Two Illinois community colleges (Rock Valley College and Southwestern Illinois College) graduated a total of 17 students from sheet metal worker programs in FY 2002, of whom 9 (52.9 percent) responded to the follow-up survey. Survey results indicate that 8 (88.9 percent) of these 9 respondents reported being employed, while only 1 graduate (11.1 percent) reported being unemployed and seeking employment. Of the 8 employed graduates, all 8 (100 percent) were employed full-time in a field related to sheet metal working. All 8 (100 percent) of these graduates were also employed within their respective Illinois community college districts. One hundred percent of these graduates who responded reported being satisfied with their jobs, the highest percent of all program graduates in FY 2002.

In Illinois, employment of sheet metal workers is expected to increase about as fast as average through 2008. Nationally, the number of jobs for sheet metal workers is expected to grow faster than average through the year 2010. The demand for sheet metal installations will increase as more industrial, commercial, and residential structures are built. Job growth should also be boosted by the demand for energy-efficient heating and cooling systems. However, workers may experience periods of unemployment. This may happen when construction projects end or economic conditions reduce the level of construction activity. Local economic conditions can vary. Thus, there may be shortages of sheet metal workers in some areas, and an oversupply in other parts of the country. The availability of training slots also changes with economic conditions. Over the long run, job prospects are expected to be good. The number of skilled workers is likely to be lower than the demand. Opportunities should be best for workers who complete apprenticeship training.

In Illinois, the median wage for sheet metal workers is $3,775 per month ($21.80 per hour). Nationally, the median wage for sheet metal workers is $2,655 per month ($15.30 per hour). Apprentices usually start at about 40 percent of the rate paid to experienced workers. As apprentices acquire more skills, they receive pay increases. Workers who belong to a union tend to earn higher wages than nonunion workers. Wages also vary by employer and area of the country. In addition, the worker's level of skill, experience, and responsibility affect wages. FY 2002 Illinois community college sheet metal worker graduates' average earnings were $26.68 per hour ($55,494 per year), *at least $4.50 per hour higher than both state and national median earnings*.

Figure 15 compares Follow-up Study results from FY 1997 and 2002 Sheet Metal Worker graduates. The percent of respondents either employed or pursuing further education decreased from 100 percent in FY 1997 to 88.9 percent in FY 2002. The total percent of respondents employed either full- or part-time also decreased from 100 percent in FY 1997 to 88.9 percent in FY 2002. In both fiscal years, no sheet metal workers were pursuing additional education and not employed. The percent of respondents unemployed and seeking employment increased from 0 percent in FY 1997 to 11.1 percent in FY 2002. The percent of respondents employed within their respective Illinois community college district remained steady at 100 percent between FY 1997 and FY 2002.

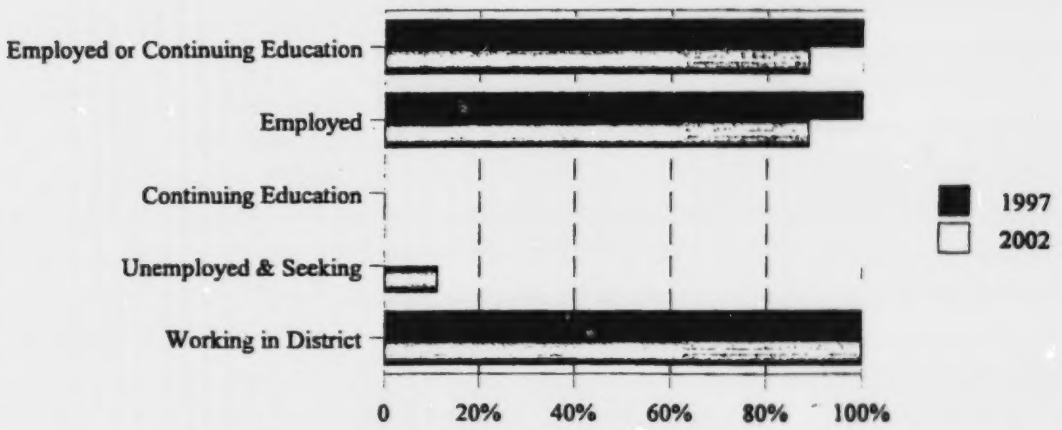

Figure 15. Sheet Metal Workers: FY 1997 and 2002

Bottom Line – In Illinois, Sheet Metal Worker is a medium-sized occupation which has experienced a decline in employment over the past five years. However, this field is expected to grow as fast as average In Illinois through 2008 and faster than average nationally through 2010. Illinois community college graduates have an advantage over other job seekers, as indicated by their average hourly salary, which is greater than both Illinois and national median earnings in this field. The percent of these graduates satisfied with their jobs (100 percent) was *the highest among all program graduates surveyed* in FY 2002.

In Illinois, employment of tool and die makers is expected to decline slightly through 2008 (*Career Information System*, 2003).

Tool and Die Maker/Technologist

Tool and die makers are among the most highly skilled production workers and produce tools, dies, and special devices that enable machines to make products. Tool makers craft precision tools that are used to cut, form, and shape metal and other materials. They produce jigs and fixtures, devices that hold metal while it is stamped or drilled as well as gauges and other measuring devices. Die makers construct metal forms (dies) used to shape metal in stamping and forging operations as well as metal molds that are used to cast dies or mold plastics, ceramics, and other materials. In addition, tool and die makers design new tools and dies and repair worn or damaged tools, dies, jigs, fixtures, and gauges. To do their work, tool and die makers use many types of machine tools and precision measuring instruments. They must also be familiar with the properties of many common metals. Tool and die makers work from blueprints or instructions. First, they plan the sequence of operations needed to produce the tool or die. Next, they measure and mark the pieces of metal that will be cut to form parts of the final product. At this point, tool and die makers cut, drill, or bore the part. Then they check to be sure that the final product meets requirements. Finally, they assemble the parts and do finishing tasks. They file, grind, or polish the surfaces to finish them (*Career Information System*, 2003).

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Modern technology is changing the way that tool and die makers do their jobs. Many tool and die makers now use computer-aided design (CAD) to develop products and parts. With CAD, workers enter specifications into computer programs. These programs then produce drawings for the required tools and dies. The electronic drawings are processed by a computer-aided manufacturing (CAM) program. The program calculates the tool path and the sequence of operations. Computer numerically controlled (CNC) machines then produce the die (*Career Information System*, 2003).

Nine Illinois community colleges graduated 49 students from Tool and Die Maker/Technologist programs in FY 2002. Fifty-three percent (N=26) of these graduates returned survey information. Results indicate that 84.6 percent (N=22) were either employed, pursuing more education, or both while only 19.2 percent (N=5) were unemployed and seeking employment. Of those employed, 81 percent (N=17) were employed full-time while 19 percent (N=4) were employed part-time. Ninety-five percent (N=19) were employed within their respective community college district while 5 percent (N=1) were employed outside their district, but still in Illinois and 0 percent (N=0) were employed outside of Illinois. Of those respondents employed full-and part-time, 90.5 percent (N=19) were employed in a related field. Of those working in a related field, 88.9 percent (N=18) reported being satisfied with their present jobs.

According to the *Career Information System (2003)*, the median wage for tool and die makers in Illinois is $3,815 per month ($22.00 per hour; $45,760 per year). Nationally, the median wage for tool and die makers is $3,425 per month ($19.75 per hour; $41,080 per year). In FY 2002, Illinois community college graduates from Tool and Die Maker/Technologist programs earned an average of $15.05 per hour ($31,304 per year); somewhat less than the Illinois and National median wages. In Illinois, Tool and Die Maker/Technologist is a medium-sized occupation, employing about 9,000 people, while nationally it is a small occupation, employing only 129,600 people. In Illinois, employment of tool and die makers is expected to decline slightly through 2008. About 170 job openings are expected each year. According to the Illinois Department of Employment Security, the short-term forecast for tool and die makers through the year 2003 is very unfavorable. Nationally, the number of jobs for tool and die makers is expected to experience little or no change through the year 2010.

Figure 16 compares Follow-up Study results from FY 1997 and 2002 Tool and Die Maker/Technologist graduates. The percent of respondents either employed or pursuing additional education decreased from 90.9 percent in FY 1997 to 84.6 percent in FY 2002. The total percent of respondents employed also decreased from 91.7 percent in FT 1997 to 80.8 percent in FY 2002, while the percent of respondents pursuing additional education and not employed increased from 0 percent in FY 1997 to 4.5 percent in FY 2002. The percent of respondents unemployed and seeking employment increased from 8.3 percent in FY 1997 to 19.2 percent in FY 2002. The percent of respondents working within their respective community college districts increased from 80 percent in FY 1997 to 95 percent in FY 2002.

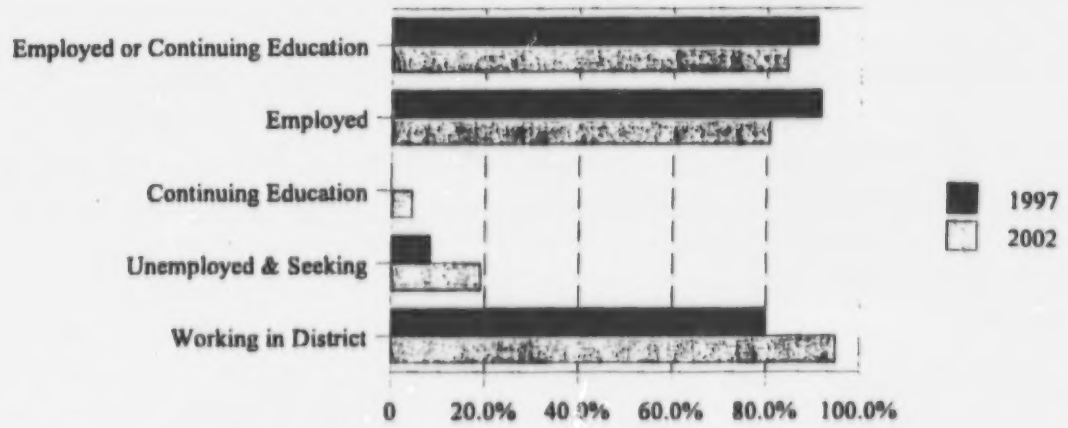

Figure 16. Tool and Die Maker/Technologist: FY 1997 and 2002

Bottom Line – In Illinois, Tool and Die Maker/Technologist is a medium-sized occupation with employment expected to decline slightly through 2008. During FY 2002, Illinois community college Tool and Die Maker/Technologist program graduates' average wage was less than the state and national median wages. In spite of this, 88.9 percent of FY 2002 program graduates employed in a related field reported being satisfied with their jobs.

In Illinois, average growth is expected in the employment of welders through 2008 (*Career Information System*, 2003).

Welder/Welding Technologist

Welders use heat to permanently join pieces of metal. Welding is the most common way to permanently join metal parts. In this process, heat applied to metal pieces melts and fuses them together. Because of its strength, welding is used in the building of ships, automobiles, and aircraft. It is also used to manufacture thousands of other products. In addition, welding is used to join beams in the construction of buildings, bridges, and other structures. Welders also repair broken or cracked metal parts. They sometimes fill holes and seams in metal products. When a job is done, they chip or grind off excess weld or solder, using hand or power tools. Welders also examine their work to be sure it meets requirements (*Career Information System*, 2003).

Some states require that welders be certified. Requirements vary by state. However, in most states certification is optional. In Illinois, this is a medium-sized occupation. About 19,990 welders are employed in the state. Nationally, about 446,500 welders and solderers work in this medium-sized occupation. Welders work mostly in metal manufacturing industries. Solderers often work on electronic equipment. Welders work in a variety of locations, including fabricated structural metal products manufacturers, motor vehicles and equipment manufacturers, as well as construction and related machinery manufacturers (*Career Information System*, 2003).

Nineteen Illinois community colleges graduated 205 students from Welder/Welding Technologist programs in FY 2002, of whom 54.1 percent (N = 111)responded to the follow-up survey. Survey

results indicate that 80.2 percent (N = 89) of these respondents reported being employed at least part-time, while 16.2 percent (N = 18) reported being unemployed and seeking employment. This was one of the highest unemployment rates among selected occupational programs, with only Architectural Drafting, Lithographer and Platemaker, and Tool and Die Maker/Technologist program graduates having higher unemployment rates. Of those employed, 89.9 percent (N = 80) reported being employed full-time while 10.1 percent (N = 9) reported being employed part-time. Nearly 70 percent (69.8 percent; N = 60) reported being employed within their respective Illinois community college district while the remaining respondents equally reported being employed out-of-district in Illinois (15.1 percent; N = 13) and out-of-state (15.1 percent; N = 13). Of the respondents employed full- and part-time, 64.4 percent (N = 56) reported being employed in a related field. While 91.8 percent of Welder/Welding Technologist program graduates reported overall satisfaction with their educational program, 85.7 percent of those working in a related field reported being satisfied with their job.

In Illinois, the median wage for welders and solderers is $2,325 per month ($13.40 per hour, $27,900 per year). Nationally, the median wage for welders and solderers is $2,275 per month ($13.15 per hour, $27,300 per year). Many welders work overtime and earn more than the above wages. In addition, more than one-fourth of welders belong to unions. Union members often earn higher wages than nonunion members. The average earnings of Illinois community college Welder/Welding Technologist program FY 2002 graduates working full-time was $15.00 per hour (approximately $31,200 per year, not including overtime pay). This average is above both state and national median earnings in this field.

In Illinois, average growth is expected in the employment of welders and solderers through 2008. About 830 job openings are expected each year. Nationally, the number of jobs for welders and solderers is expected to grow as fast as average through the year 2010. If the economy improves, the demand for welders and solderers should remain high. However, if the economy slows, workers in some industries may be laid off or work fewer hours. This is most likely to happen in construction and auto manufacturing. The increasing use of robots to do tasks will have the most impact on low-skilled manual welders because the jobs that become automated are the simple, repetitive ones. Welders who work on construction projects or in equipment repair are less likely to be affected because their jobs are not as easily automated. Job prospects should be excellent for welders with the right skills. Many employers report difficulty finding qualified applicants. In addition, other openings will arise as workers retire or leave the occupation for other reasons (*Career Information System*, 2003).

Figure17 compares Follow-up Study results from FY 1997 and 2002 Welder/Welding Technologist graduates. The total percent of respondents either employed or pursuing further education decreased from 91.9 percent in FY 1997 to 84.4 percent in FY 2002. The total percent of respondents employed also decreased from 89.2 percent in FY 1997 to 80.2 percent in FY 2002. However, the percent of respondents pursuing additional education and not employed increased from 3.8 percent in FY 1992 to 4.3 percent in FY 2002. The percent of respondents unemployed and seeking employment increased from 5.4 percent in FY 1997 to 16.2 percent in FY 2002. The percent of respondents working within their respective Illinois community college district increased from 53.3 percent in FY 1997 to 69.8 percent in FY 2002.

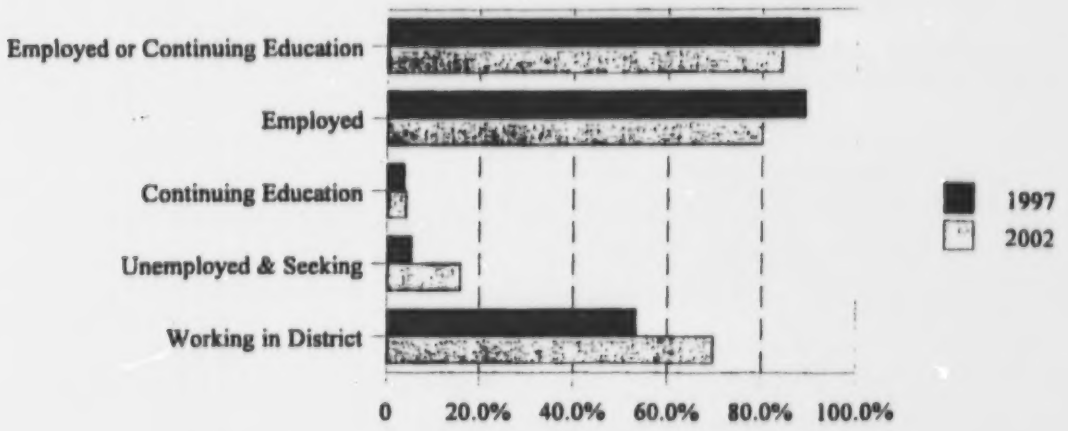

Figure 17. Welder/Welding Technologist: FY 1997 and 2002

Bottom Line – In Illinois, Welder/Welding Technologist is a medium-sized occupation. With unemployment up drastically from 1997, competition in this field is very high. In spite of the high unemployment rate, Illinois community college Welder/Welding Technologist program graduates had an advantage over other job-seekers, which shows in their average earnings, which were *nearly $2.00 per hour higher than the state and national median earnings*.

Overall, jobs in design and applied arts are expected to grow as fast as or faster than average for all occupations through the year 2010 (*Occupational Outlook Handbook*, 2002 - 2003).

Design and Applied Art

Designers are people with a desire to create. They combine practical knowledge with artistic ability to turn abstract ideas into formal designs for the merchandise we buy, the clothes we wear, the publications we read, and the living and office space we inhabit. Design encompasses a number of different fields. Many designers specialize in a particular area of design, whereas others work in more than one area. *Commercial and industrial designers*, including designers of commercial products and equipment, develop countless manufactured products, including airplanes; cars; children's toys; computer equipment; furniture; home appliances; and medical, office, and recreational equipment. *Fashion designers* design clothing and accessories. *Floral designers* cut and arrange live, dried, or artificial flowers and foliage into designs, according to the customer's order. *Graphic designers* use a variety of print, electronic, and film media to create designs that meet clients' commercial needs. *Interior designers* plan the space and furnish the interiors of private homes, public buildings, and business or institutional facilities, such as offices, restaurants, retail establishments, hospitals, hotels, and theaters. *Merchandise displayers and window dressers*, or *visual merchandisers*, plan and erect commercial displays, such as those in windows and interiors of retail stores or at trade exhibitions. *Set and exhibit designers* create sets for movie, television, and theater productions and design special exhibition displays (*Occupational Outlook Handbook*, 2003).

Artists create art to communicate ideas, thoughts, or feelings. They use a variety of methods — painting, sculpting, or illustration — and an assortment of materials, including oils, watercolors, acrylics, pastels, pencils, pen and ink, plaster, clay, and computers. Artists generally fall into one of three categories. *Art directors* formulate design concepts and presentation approaches for visual communications media. *Fine artists, including painters, sculptors, and illustrators* create original artwork using a variety of media and techniques. *Multi-media artists and animators* create special effects, animation, or other visual images using film, video, computers or other electronic media (*Occupational Outlook Handbook*, 2003).

Overall, the employment of designers is expected to grow faster than the average for all occupations through the year 2010. Employment of artists and related workers is expected to grow as fast as the average for all occupations through the year 2010. Many talented individuals are attracted to careers in design and applied arts, making this area a competitive field.

Two Design and Applied Art programs included in this report are:

Program Area	CIP Code
Design and Visual Communications	500401
Commercial Photography	500406

Nationally, and in Illinois, employment of graphic designers is expected to increase faster than average through 2010 (*Career Information System*, 2003).

Design and Visual Communications

Graduates with a Design and Visual Communications degree are able to use a variety of print, electronic, and film media to create designs that meet clients' commercial needs. Often using computer software, they develop the overall layout and design of magazines, newspapers, journals, corporate reports, and other publications. They also may produce promotional displays and marketing brochures for products and services, design distinctive company logos for products and businesses, and develop signs and signage systems — called environmental graphics — for business and government. An increasing number of graduates in this field develop material to appear on Internet home pages (*Occupational Outlook Handbook*, 2002-03).

Nationally and in Illinois, employment of graphic designers is expected to increase faster than average through 2010. The demand for graphic designers will be due in part to the growth of the Internet. Graphic designers will be needed to design and lay out web pages. Additionally, businesses will continue to want visually appealing ideas for their products, publications, and videos. Despite high demand, competition will be strong for the best jobs due to employers paying the highest wages to the most talented designers. In Illinois, this is a medium-sized occupation with about 7,490 graphic designers employed in the state. The major employer of graphic designers include mailing and copying companies, advertising agencies, printing and business form companies, and newspapers (*Career Information System*, 2003 and *Occupational Outlook Handbook*, 2002-03).

The response rate was 54.2 percent as 84 of the 155 Design and Visual Communications graduates responded to the survey. Fourteen colleges provided information about their fiscal year 2002

graduates in this area. College of DuPage (N = 30), Illinois Central College (N = 10), and Elgin Community College (N = 9) were among the colleges with the largest number of respondents. For all respondents in the area of Design and Visual Communications, 94 percent were employed, pursuing additional education, or both. Almost one out every ten graduates were unemployed and seeking employment.

Six out every ten Design and Visual Communications graduates were working in a related field. Graduates employed in the Design and Visual Communications field were very satisfied (92.1 percent) with their jobs. The main reason graduates were working in an unrelated field was because they could not find a job in the field of preparation (N = 13).

Three-quarters of Design and Visual Communications graduates located their current positions while enrolled or after completing their program. The others had their current positions prior to entering the program. Just over two-thirds of the graduates were employed within the district where they received training. A quarter of the graduates located employment out of the district but in Illinois. The remaining graduates (8.5 percent) were working outside of the state.

Approximately 63.6 percent of working graduates were employed in full-time positions. The average wage for full-time Design and Visual Communications graduates was $14.50/hour or the equivalent $30,160 annually. Design and Visual Communications graduates working part-time earned $9.75/hour. According to the *Career Information System* (2003), in Illinois, the median wage for graphic designers is $2,930 per month ($16.90 per hour). Nationally, the median wage for graphic designers is $3,000 per month ($17.32 per hour). Half of all graphic designers earn between $2,330 and $3,940 per month ($13.42 and $22.71 per hour). Wages vary in different parts of the country. Wages also vary based on the type of project and the skill of the graphic designer. Experienced, self-employed graphic designers can earn much more than those who earn salaries. However, when they are starting out, they can earn much less. Wages tend to be higher in some industries, such as advertising.

Overall, Design and Visual Communications graduates were generally satisfied with the components (87 percent) in their major. Respondents were particularly satisfied with course content (97.5 percent), lecture/lab experience (96.1 percent), and equipment/facilities materials (93.4 percent). Labor market employment information (62.7 percent) was rated the lowest among components. Design and Visual Communications graduates were less satisfied with college services (78.4 percent) compared to program components. Respondents were most satisfied with library/audio visual (94.7 percent) and tutoring (87.5 percent). The lowest rated services among respondents were transfer planning (64.7 percent) and career planning (65.5 percent).

As **Figure 18** illustrates, the 2002 graduates had better outcomes than 1997 Design and Visual Communications graduates. The 2002 graduates had a higher rate of employment, continuing education, or both (94 percent for 2002 versus 78.4 percent for 1997). Likewise, the 2002 graduates had a greater proportion of those exclusively employed (78.6 percent for 2002 versus 71.7 percent for 1997). Additionally, the 2002 graduates were less likely to be unemployed (9.5 percent for 2002 compared to 15.1 percent for 1997). Recent graduates more frequently remained in the district where they received their training (66.1 percent in 2002 versus 51.1 percent in 1997).

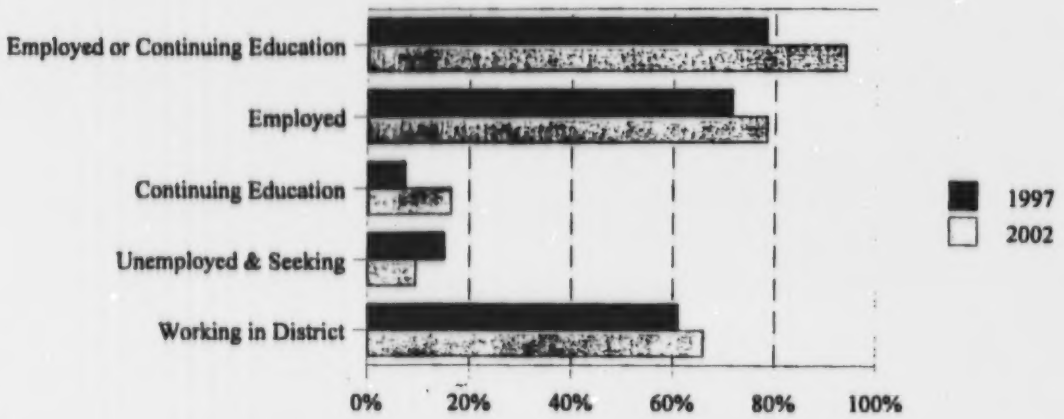

Figure 18. Design and Visual Communications Graduates: FY 1997 and 2002

Bottom Line – Design and Visual Communication graduate employment and/or education outcomes were very high (94 percent). Earnings for full-time graduates were slightly below average ($14.50/hour) compared to the other programs in the follow-up study. A high percentage (36.4 percent) of employed graduates were working part-time. For full-time and part-time working graduates, only 62 percent were working in a related field. The unemployment rate for Design and Visual Communication graduates was 9.5 percent which shows improvement from earlier years. Eighty-seven percent of the graduates were satisfied with components of the programs they completed. Graduates were less satisfied with college services (78.4 percent). Overall, the outcomes for current Design and Visual Communication graduates were more positive than those of graduates from five years ago. Faster than average growth for Design and Visual Communication graduates is expected through 2010 as technology, such as the internet, in businesses continues to increase.

In Illinois, employment of photographers is expected to increase about as fast as average through 2008 (*Career Information System*, 2003).

Commercial Photography

To create commercial quality photographs, commercial photographer graduates at community colleges receive training in both technical expertise and creativity. Producing a successful picture requires choosing and presenting a subject to achieve a particular effect and selecting the appropriate equipment. Commercial photography emphasizes taking pictures of various subjects, such as buildings, models, merchandise, artifacts, and landscapes to meet commercial and industry needs (*Career Information System*, 2003 and *Occupational Outlook Handbook*, 2002-03).

In Illinois, employment of photographers is expected to increase about as fast as average through 2008. About 200 job openings are expected each year. According to the Illinois Department of Employment Security, the short-term forecast for photographers through the year 2003 is unfavorable. Nationally, the number of jobs for photographers is expected to increase as fast as average through the year 2010 (*Career Information System*, 2003).

Photography is a medium-sized occupation in Illinois. About 6,850 photographers are employed in the state. Nationally, about 130,600 photographers work in this small occupation. The outlook for photographers varies by employer. Most of the growth for photographers will be with news and wire services. Photographers will be needed to use digital equipment to transmit digital images. However, keen competition is expected for photographers because this field attracts so many people (*Career Information System*, 2003).

The response rate was 73.7 percent as 14 of the 19 Commercial Photography graduates responded to the survey. The College of DuPage (N = 13) and Prairie State College (N = 1) had respondents to the survey. Around 93 percent of the graduates were either employed, pursuing additional education, or both. Almost one-half of the total graduates were both employed and pursuing additional education. For those graduates that were both employed and pursuing additional education, all were studying in a field related to commercial photography.

Five out of the ten working graduates were working in a related field. Of the five graduates working in a related field, four were satisfied with their jobs. The 5 individuals working outside of the field cited the following reasons for not having a job related to Commercial Photography: could not find job in field of preparation (N = 2), temporary job while in transition (N = 2), and other (N = 1).

Seven out of the ten working graduates were employed in full-time positions. The average wage for Commercial Photographers working full-time who graduated from community colleges was $11.03 per hour or an estimated $22,942 annually. Commercial Photographers employed part-time earned $8.17 per hour. In Illinois, the median wage for photographers is $3,095 per month ($17.85 per hour). Nationally, the median wage for photographers is $1,860 per month ($10.70 per hour). Half of all photographers earn between $1,400 and $2,750 per month ($8.05 and $15.85 per hour) (*Career Information System*, 2003).

Of the ten employed Commercial Photography graduates, eight located their positions either while enrolled or after completing their program. Six of the graduates from this program located employment in the district where they received their training. The remaining four working graduates were working outside of the district, but still in Illinois.

Just over 89 percent of the Commercial Photography graduates were satisfied with the components of the program they completed. The most highly rated components included course content (100 percent) and lecture/lab experience (100 percent). Equipment facilities materials (78.6 percent) and labor market employment information (71.4 percent) were below the average compared to other program graduates surveyed. Overall, 88.2 percent of Commercial Photography graduate respondents were satisfied with college services. All graduates were satisfied with academic advising, transfer planning, library/audio visual, and student activity. Career planning (66.7 percent) and tutoring (83.3 percent) fell just below the state average.

Figure 19 contains comparative information for Commercial Photography graduates from fiscal year 2002 and fiscal year 1997. Outcomes were slightly more positive for fiscal year 2002 graduates. Although comparable, more recent graduates exhibited slightly higher levels of employment and/or continuing education and exclusively employed. Graduates in 2002 and 1997 had an unemployment rate of zero. In-district employment was higher among 2002 graduates.

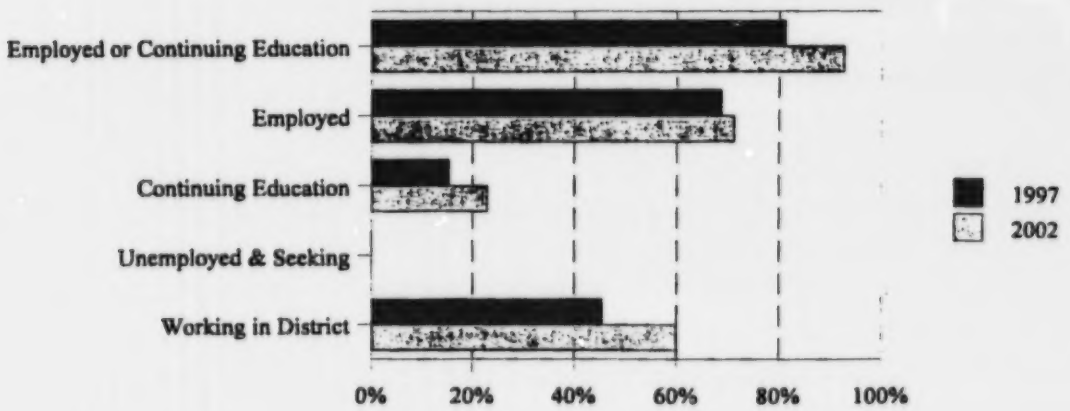

Figure 19. Commercial Photography Graduates: FY 1997 & 2002

Bottom Line – Commercial Photography graduate employment and/or education outcomes were above average (92.7 percent), however, earnings for full-time working graduates were very low compared to the field. This is partially attributable to the large proportion of graduates no working in an area related to Commercial Photography. Of the ten working Commercial Photography graduates, five were working in an unrelated field. Four individuals were not seeking employment after receiving their Commercial Photography degree. Eighty percent of the graduates were satisfied with their positions in a related field. Commercial Photography graduates were very satisfied with the program components (89.3 percent) and services (88.2 percent). Outcomes for current Commercial Photography graduates were generally positive, with more recent graduates having slightly better results. Graduates with a Commercial Photography degree or certificate often find employment in many entry-level jobs in the photographic industry. A rapidly growing area of the photographic industry is computer enhancement of photographs as digital images are being used more frequently, especially in commercial applications.

In Illinois and nationally, employment of medical laboratory technicians is expected to increase about as fast as average through 2010 (*Career Information System*, 2003).

Medical Laboratory Technician

In general, medical laboratory technicians conduct tests to help detect, diagnose, and treat diseases. Physicians use laboratory tests to help them figure out what is wrong with patients. Lab technicians run tests using samples of body fluids, cells, or tissues. Sometimes they use samples to prepare slides. The slides are then examined under a microscope. Sometimes technicians run tests to chemically analyze samples to see if the samples are abnormal or diseased. They try to find and identify organisms, such as bacteria, that would indicate an infection. For other tests, technicians grow cell cultures and make sure they are grown in the right medium and temperature. After tests are run, medical laboratory technicians record, evaluate, and send results back to physicians or medical researchers (*Career Information System*, 2003).

There are two levels of medical laboratory workers — technicians and technologists. Medical laboratory technologists have more training and job responsibilities. They perform more complex tests and often supervise other laboratory workers. Medical laboratory technicians do most of the routine laboratory testing. Technicians may prepare specimens and use machines that automatically analyze samples. Other responsibilities may include following detailed instructions to do tests by hand or recording results on computers. Some technicians run all types of tests while others specialize in such areas as phlebotomy and histology (*Career Information System*, 2003).

In Illinois, employment of medical laboratory technicians and technologists is expected to increase about as fast as average through 2010. About 480 job openings are expected each year. Nationally, the number of jobs for medical laboratory technicians and technologists is expected to grow about as fast as average through the year 2010. The number of medical tests, treatments, and procedures that are performed each year is growing rapidly. In addition, new tests will be developed and added to the number of tests run. However, technological advances will limit job growth. Some tests can be run by robots or less-skilled workers (*Career Information System*, 2003 and *Occupational Outlook Handbook*, 2002-03).

The response rate for Medical Laboratory Technician graduates was 62.6 percent with 82 out of 131 graduates responding to the survey. The College of Lake County (N = 34) and Wilbur Wright College (N = 12) were among the larger programs in this area. Just over 93 percent of all medical laboratory technician graduates were employed, pursuing additional education, or both. Among those graduates who reported on their employment and participation in further education: 66.7 percent were exclusively employed and 23.2 percent were engaged in both employment and additional education.

The unemployment rate for Medical Laboratory Technician graduates was 3.9 percent (N = 3) and 11.8 percent were not actively seeking employment (N = 9). Among working graduates 81.3 percent were employed in full-time positions. Among working graduates 76.6 percent were employed in a related field. Those working in a related job were sightly more satisfied (89.1 percent) than most other graduates working in a position related to the program.

Just over one-half of the individuals working outside the Medical Laboratory field were satisfied with their work. Reasons cited by the 15 graduates who indicated they were working in an unrelated job included: could not find job in the field of preparation (N = 8), temporary job while in transition (N = 3), preferred to work in another field (N = 2), found better paying job in another field (N = 1), and other (N = 1).

Community college Medical Laboratory Technician graduates working in full-time positions earned $12.46 per hour or an estimated $25,916 annually. Part-time Medical Laboratory Technician graduates earned $11.81 per hour. According to CIS (2003), in Illinois, the median wage for all Medical Laboratory Technician graduates is $28,808 annually($13.85 per hour). Half of all technicians earn between $1,940 and $2,970 per month ($11.22 and $17.12 per hour).

Slightly more than two-thirds of the Medical Laboratory Technician completers were employed in the district where they received their training. Twelve graduates were working elsewhere in the state, and ten were working outside of the state. Almost 83 percent of the graduates obtained their latest

positions either while in training or after they completed the program. Just over 17 percent had their current positions when they entered the program.

Medical Laboratory Technician program graduates reported an eighty-six percent level of satisfaction with program components. The highest rated components were course content 95.1 percent), lecture/lab experience (92.7 percent), and job preparation (88.9 percent). Labor market information (75.0 percent) was rated lowest among components.

Medical Laboratory Technician completers were somewhat satisfied with college services (78.9 percent). Satisfaction ratings were highest for library/audio visual (89.4 percent), financial aid (82.9 percent), and tutoring (82.6 percent). Transfer planning (72.0 percent), student activity (73.3 percent), and career planning (73.5 percent) were rated lowest among service components.

Figure 20 contains comparative information about selected items between Medical Laboratory Technician graduates in 2002 and 1997 completers. Outcomes for graduates from both time frames were similar and generally positive. Graduates in 2002 had a lower unemployment rate than their counterparts from 1997 (3.9 percent in 2002 compared to 4.5 percent in 1997). Although comparable, more 1997 graduates exhibited slightly higher levels of employment and/or continuing education and exclusively employed. Graduates from 2002 were slightly more likely to be employed within the district were they were trained.

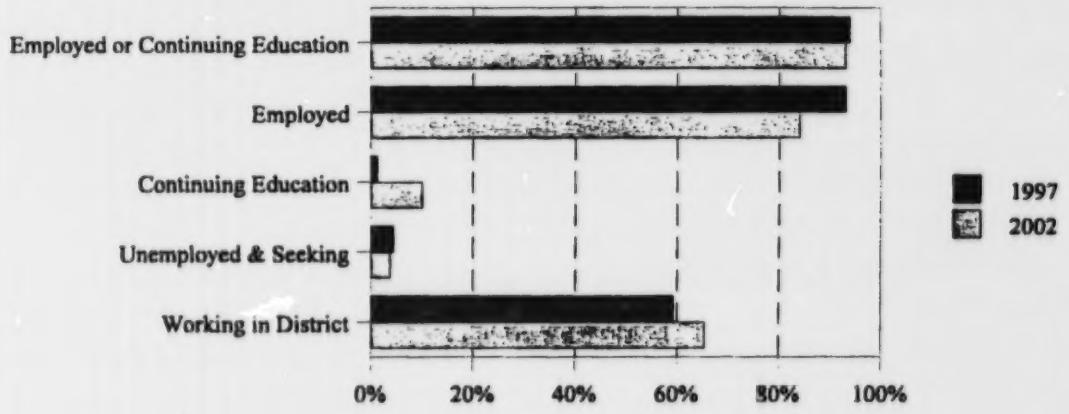

Figure 20. Medical Laboratory Technician: FY 1997 & 2002

Bottom Line – Medical Laboratory Technician graduate outcomes for employed, pursuing additional education, or both were sightly above average (93.2 percent) compared to all programs in this study. Community college Medical Laboratory Technician graduates working in full-time positions earned $12.46/hour or an estimated $25,916 annually which was slightly lower than the average for the industry. Graduates working in a related field were satisfied with their positions (89.1 percent). Three individuals were unemployed and seeking employment for an unemployment rate of 3.9 percent. Overall, Medical Laboratory Technician graduates were generally satisfied with their program components (86.4 percent) and college services (78.9 percent). Outcomes for Medical Laboratory Technician graduates were positive for current graduates and graduates from five years ago. The

number of medical tests, treatments, and procedures that are performed each year is growing rapidly. However, technological advances will limit job growth as some tests can be ran by robots and less-skilled workers.

"Bookkeeping, accounting and auditing clerks" is one of the 50 occupations expected to provide the most job openings each year in Illinois (*Career Information System*, 2003).

Accounting Technician

Bookkeeping, accounting, and auditing clerks are an organization's financial recordkeepers. They update and maintain one or more accounting records, including those that tabulate expenditures, receipts, accounts payable and receivable, and profit and loss. They have a wide range of skills and knowledge, from full-charge bookkeepers, who can maintain an entire company's books, to accounting clerks who handle specific accounts. All of these clerks make numerous computations each day and increasingly must be comfortable using computers to calculate and record data. *(Occupational Outlook Handbook*, 2002-03).

In this very large occupation, about 72,230 bookkeeping, accounting and auditing clerks work in the state. Nationwide, about 1,990,800 bookkeeping and accounting clerks work in this very large occupation. They work in almost every industry including wholesale trade companies, local, state, and federal government agencies, and temporary worker agencies. In Illinois, little or no change is expected in the employment of bookkeeping, accounting, and auditing clerks through 2010. Virtually all job openings will stem from replacement needs.

"Bookkeeping, accounting and auditing clerks" is one of the 50 occupations expected to provide the largest number of job openings each year in Illinois. About 1,510 job openings are expected annually. Nationally, the number of jobs for bookkeeping and accounting clerks is expected to show little or no change through the year 2010 (*Career Information System*, 2003 and *Occupational Outlook Handbook*, 2002-03).

The response rate for the Follow-up Study survey was 66.4 percent as 237 of the 357 Accounting Technician graduates responded to it. Thirty-six colleges provided information about their fiscal year 2002 graduates. The College of DuPage (N = 26), William Rainey Harper College (N = 24), Richard J. Daley College (N = 15), Lake Land College (N = 12), and Carl Sandburg College (N =11) were among the colleges with the largest number of respondents.

Almost 85 percent of graduates were either employed, pursuing additional education, or both (N = 190). Just over 15 percent of Accounting Technician graduates were unemployed while an additional 7.9 percent were unemployed but not seeking employment. 122 Accounting Technician graduates were working in a related field (73.5 percent). The major reasons individuals were not working in a related field included: could not find work in field of preparation (N = 14), other/not indicated (N = 10), found better paying job in another field (N = 6), preferred to work in another field (N = 4), and took job in order to get preferred working hours (N = 4).

Close to 62 percent of Accounting Technician graduates located their current positions while enrolled or after completing the program. Approximately 85.5 percent remained in the district where

they received their training to find employment. Just over 12 percent were working outside of the district they were trained in, but still in Illinois. Four graduates were working outside the state (2.3 percent).

Approximately 85.8 percent of working graduates were employed in full-time positions. The average wage for full-time Accounting Technician workers who were community college graduates was $14.36 per hour or the equivalent of $29,869 annually. Accounting Technician graduates working part-time earned $9.38 per hour. According to CIS (2003), in Illinois, the median wage for bookkeeping and accounting clerks is $12.85 per hour or the equivalent of $26,728 annually.

Overall, 90 percent of Accounting Technician graduates were satisfied with the component in their major. Respondents rated course content (97.4 percent) and equipment facilities/materials (94.8 percent) the highest. The lowest rated component for Accounting Technician graduates was labor market employment information (74.7 percent). Accounting Technician graduates were slightly less satisfied with services at their college (83.2 percent). Respondents gave the highest ratings to library audio/visual (92.0 percent), financial aid (86.0 percent), and student activity (84.2 percent). Just over 73 percent of the graduates were satisfied with transfer planning which was rated lowest by Accounting Technician completers.

Figure 21 contains comparative information for Accounting Technician graduates from fiscal year 2002 and fiscal year 1997 graduates. Differences exist between fiscal year 2002 and fiscal year 1997 graduates. The rate of those exclusively employed and the percentage of those employed or continuing education or both was higher for the 1997 graduates. The more recent graduates had a higher rate of those unemployed (15.3 percent for fiscal year 2002 graduates versus 5.9 percent for fiscal year 1997 graduates). The more recent graduates had a higher rate of those continuing education and a higher percentage of those working in the district.

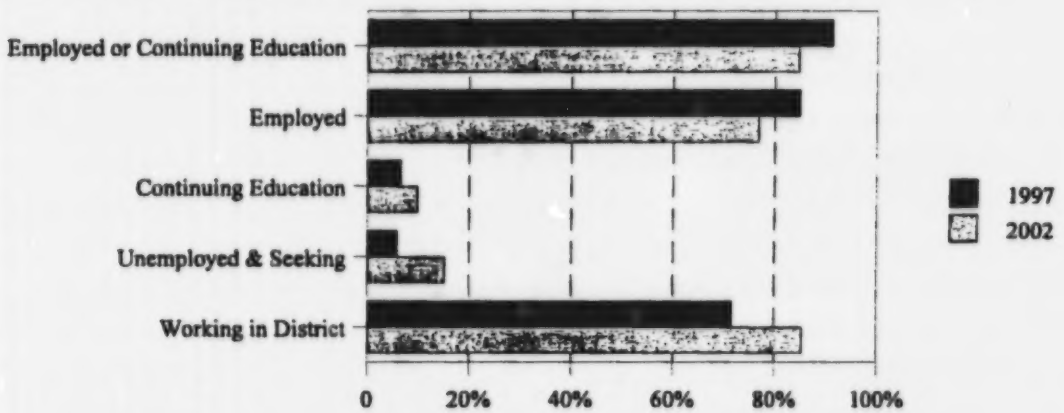

Figure 21. Accounting Technician Graduates FY 1997 & FY 2002

Bottom Line – Approximately 84.8 percent of Accounting Technician graduates were employed, pursuing additional education, or both. The average wage for full-time Accounting Technician workers who were community college graduates ($14.36 per hour) was higher than median wage for bookkeeping and accounting clerks ($12.85 per hour) throughout Illinois. Slightly over 84 percent

of Accounting Technician graduates working in a related field were satisfied with their positions. Results were for recent Accounting Technician graduates were generally positive compared to program completers from five years ago. However, the unemployment rate for Accounting Technician graduates was much higher for 2002 graduates (15.3 percent) compared to completers in 1997 (5.9 percent). According to CIS (2003) "Bookkeeping, accounting and auditing clerks" is one of the 50 occupations expected to provide the most job openings each year in Illinois.

In Illinois, the employment of bank tellers and loan clerks is expected to decline through 2010 (*Career Information System,* 2003).

Banking and Financial Support Services

Instruction in this area is focused on communications and public relations skills, business equipment operation, and technical skills applicable to the methods and operations of specific financial or insurance services. Career opportunities in finance are quite extensive and diversified. Individuals completing programs in this area would be able to find employment in banking, commercial credit and collections, finance, insurance and real estate.

In Illinois, the employment of bank tellers and loan clerks is expected to decline through 2010. The decline of bank tellers is due to changes in the banking industry. As banks merge and become larger, they close some branches. When they add branches, they usually are small branches in grocery stores that offer fewer services. Another change is that banks are using technology to provide services. By having customers use ATMs, direct deposit, and the Internet, banks need fewer tellers to work with customers. Similarly, technology is reducing the number of loan clerks. The number of loans and credit applications processed each year is expected to increase. However, computers are doing much of the processing. This will reduce the need for clerks to handle forms (*Career Information System*, 2003).

The response rate of Banking and Financial Support Services graduates was 76.0 percent with 12 of 16 graduates responding. Due to the small number of respondents caution should be used in generalizing from the results of the survey. Eight community colleges reported on Banking and Financial Support Services graduates. Ten graduates were employed, pursuing further education, or both. Nine were exclusively employed and one was employed and pursuing further education. One individual was unemployed. Nine working graduates from Banking and Financial Support Services programs were employed in a related field. All nine of the graduates employed in a related field were satisfied with their positions. There were two individuals that did not find employment in a related field. The reasons for finding employment in an unrelated field were: preferred to work in another field (N = 1) and found better paying job in another field (N = 1). Three Banking and Financial Support Services graduates acquired their jobs prior to entering the program. Seven graduates began employment during program enrollment, and another graduate began their latest job after program completion. Nine graduates found employment with their college's district. One graduate worked out of the district but in Illinois and another individual was employed out of the state.

Based on nine responses, the average salary for Banking and Financial Support Services program graduates working full-time was $15.58 per hour or $32,406 annually. No information was available for part-time graduates. According to CIS (2003), in Illinois the median wage for credit and loan

clerks is $2,745 per month ($15.85 per hour) while for bank tellers the median wage is $1,580 per month ($9.10 per hour) (*Career Information System*, 2003).

Approximately 97.2 percent of the Banking and Financial Support Services graduates were satisfied with their program components. All of the graduates were satisfied with course content, lecture/lab experience, equipment/facilities materials, job preparation, and preparation for further education. Labor market information (83.3 percent) was the lowest rated program component. Banking and Financial Support Services graduates were less satisfied with college services (80.0 percent). Respondents gave the highest ratings to library audio/visual (100.0 percent), student activity (100.0 percent), and counseling (85.7 percent). Career planning was rated the lowest by Financial Support Services completers.

Figure 22 contains comparative information for Banking and Financial Support Services graduates from fiscal year 2002 and fiscal year 1997. Outcomes were slightly more positive for fiscal year 1997 graduates. Graduates from fiscal year 1997 and 2002 has almost identical results for employment and/or continuing education and exclusively employed. Of fiscal year 1997 graduates, 4 percent were unemployed versus 8.3 percent from fiscal year 2002. More of the fiscal year 2002 graduates were working in-district after graduating.

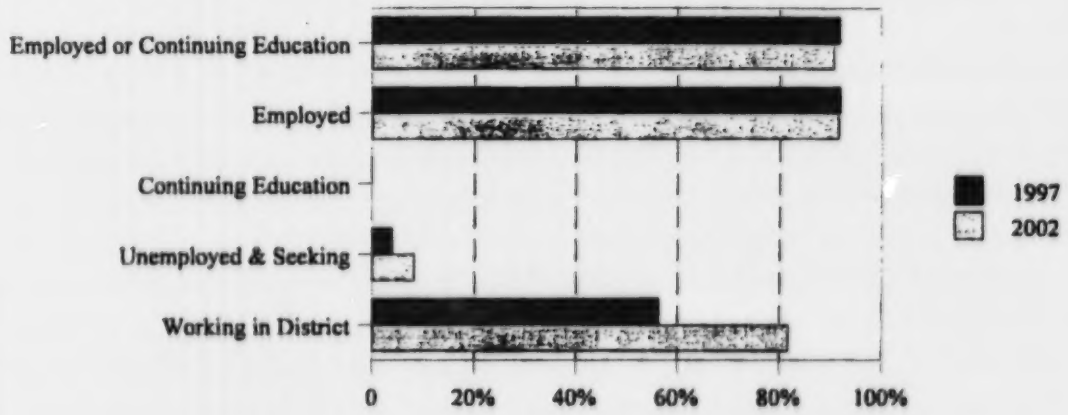

Figure 22. Banking and Financial Support Services Graduates: FY 1997 & 2002

Bottom Line – Overall results were positive for Banking and Financial Support Services completers. Almost 91 percent of Banking and Financial Support Services graduates were employed, pursuing further education, or both. Just under 92 percent were exclusively employed. Nine of the eleven working graduates were employed in a field related to their area or study. The unemployment rate among Banking and Financial Support Services was 8.3 percent compared to 4 percent in 1996. Earnings for full-time workers were competitive with the field at $15.58 per hour. Banking and Financial Support Services graduates working in a related field were generally satisfied with their positions at 88.9 percent. Overall, graduates were highly satisfied wi the programs they completed (97.2 percent). Graduates reported an 80.0 percent level of satisfaction with college services.

CONCLUSIONS AND RECOMMENDATIONS

The *Follow-up Study of Fiscal Year 2002 Career and Technical Education Program Graduates*, is based on results from individuals who completed designated career and technical education programs. Graduates furnished information about the effectiveness of their college experience in preparing them for the workplace and performance outcomes are documented. Every college with completers in the selected programs surveys its graduates to obtain data on employment, continuing education, and compensation. Additionally, information is obtained to assess the extent to which graduates are satisfied with their careers, the programs they completed and college services. Data are used at the state and local levels to review programs and determine needed improvements. Results are also used by college officials to develop new program proposals and keep workforce curricula aligned with the changing job market. Below is the list of programs included in this year's report.

CAREER AND TECHNICAL EDUCATION PROGRAM AREAS SURVEYED IN FY 2003 BY CIP CATEGORY

CIP	Title
1203	FUNERAL SERVICES AND MORTUARY SCIENCE
120301	Funeral Services and Mortuary Science
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES
150702	Quality Control Technology/Technician
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES
150805	Mechanical Engineering/Mechanical Technology/Technician
150810	Computer-Aided Design
1511	MISCELLANEOUS ENGINEERING-RELATED TECHNOLOGIES*
151102	Surveying*
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS
200501	Home Furnishings and Equipment Installers and Consultants, General
2503	LIBRARY ASSISTANT
250301	Library Assistant
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPAIRERS
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers

CAREER AND TECHNICAL EDUCATION PROGRAM AREAS SURVEYED IN FY 2003 BY CIP CATEGORY

(Continued)

CIP	Title
4801	DRAFTING
480102	Architectural Drafting
480105	Mechanical Drafting
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS
480201	Graphic and Printing Equipment Operators, General*
480205	Mechanical Typesetter and Composer*
480206	Lithographer and Platemaker
480208	Printing Press Operator*
480212	Desktop Publishing Equipment Operator
4805	PRECISION METAL WORKERS
480501	Machinist/Machine Technologist
480503	Machine Shop Assistant
480506	Sheet Metal Worker
480507	Tool and Die Maker/Technologist
480508	Welder/Welding Technologist
480520	Numerical Control*
5004	DESIGN AND APPLIED ART
500401	Design and Visual Communications
500402	Graphic Design, Commercial Art and Illustration*
500406	Commercial Photography
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS
511004	Medical Laboratory Technician
5118	OPHTHALMIC/OPTOMETRIC SERVICES *
511801	Opticianry/Dispensing Optician*
511803	Ophthalmic Medical Technologist*
5203	ACCOUNTING
520302	Accounting Technician
5208	FINANCIAL MANAGEMENT SERVICES
520801	Finance, General*
520803	Banking and Financial Support Services
520807	Investments and Securities*

* Excluded from state report due to low number of graduates or low response rates.

Highlights and recommendations from the report are presented below.

- 88.8 percent were employed or pursuing additional education or both (Table B-1).
- 82.0 percent of the completers were employed (Table B-2).

  Among working graduates:

  - 83.6 percent held full-time status in their current jobs (Table B-2).
  - 72.6 percent were employed in positions related to the field in which they studied at the community college (Table B-5).
  - 69.0 percent obtained their current positions while enrolled or after graduating (Table B-7).
  - 92.4 percent were employed in Illinois. Of those, over three-quarters remained in the district where they received their training (Table B-8).
  - The average salary for all working graduates was $14.62 per hour (Table B-9).

Graduates from similar program areas were surveyed five years ago and differences between these two groups overall varied somewhat. The percent of graduates working in-district increased 9.9 percent, the unemployment rate increased 5.2 percent, the percent of graduates pursuing additional education increased 2.2 percent, the employment rate decreased 5.6 percent and the combined employment/continuing education rate also decreased 3.4 percent. Differences in the overall economic climate could explain a portion of these differences.

The unemployment rate for current graduates was 10.4 percent, *double the 5.2 percent unemployment rate among graduates from five years ago*. Most of this increase can be attributed to differing overall economic conditions at the two points in time. Illinois' economy was much more favorable five years ago than it has been this past year, while minimum wage has remained the same ($5.15 per hour) for the past five years, when graduates from these programs were last surveyed.. Statewide unemployment in Illinois was 6.8 percent in August of 2003 and 4.4 percent in August of 1998. U.S. unemployment rates were 6.1 percent in August of 2003 and 4.5 percent in August of 1998 (*Labor and Market Information Source*, 2003).

- Career or job switching was up, as 27.4 percent of graduates were working in an unrelated field, increased from 24.2 percent of 1997 graduates (Table B-5).
- Earnings were up among more recent graduates, as the average hourly wage of $14.62 across both full- and part-time graduates increased $2.15 from five years ago ($12.47). Current graduates earned 2.8 times minimum wage ($5.15 per hour), up from approximately 2.4 times minimum wage graduates earned five years ago (Table B-9).

The largest programs — 100 full-time workers or more providing salary data — exhibited sizable raises including:

- Current graduates' full-time employment rated remained at 83.6 percent, the same as it was five years ago (Table B-2).

- A decrease of 3.4 percent was noted in the combined proportion of recent graduates who were employed, continuing education, or both (88.8 percent) compared to five years ago 92.2 percent). However, graduates from both years show strong positive outcomes in this combined measure (Table B-1).

- In-district employment was 9.9 percent higher among recent graduates. Across all programs, 71.4 percent of FY 2002 graduates were employed in-district, compared to 61.5 percent of FY 1997 graduates (Table B-8).

Nearly three-quarters of the FY 2002 graduates and two-thirds of the FY 1997 graduates were working in the community college district in which they received their training; thereby contributing to the local economy (Table B-8). Only 7.6 percent of FY 2002 and 8.2 percent of FY 1997 graduates were working out-of-state, indicating that community college graduates overwhelmingly remain either in-district or within the state of Illinois after completing their studies.

Bottom line questions for programs incorporate some variation of the following themes relating to programmatic need, quality, and cost. Are the students working and/or continuing their education (quality)? To what extent are graduates working in positions unrelated to their training doing so because they cannot locate employment in the field (quality)? Relatedly, what can college officials do to provide additional assistance to facilitate related employment (quality)? To what extent do graduates locate full-time employment (quality)? Are wages competitive for the field (quality)? Are there employment opportunities for graduates from the program (labor market need)? Are graduates satisfied that their programs prepared them for the workplace (quality)? Are graduates satisfied with their current positions (quality)? To what extent is the program cost effective (cost)? Responses to these and related questions help programs align offerings with the current marketplace. The combined follow-up study and program review processes are important parts of a multi-faceted approach to addressing issues surrounding programmatic need, quality, and cost. Additional efforts by college officials to strengthen and align their programs include convening program advisory committees, making other contacts with major area employers, undertaking faculty industry exchanges, and hiring part-time faculty who are currently employed in the industry.

Overall the community college graduates exhibited high employed and/or continuing education outcomes with 88.8 percent of the respondents reporting active engagement in one or more of these activities (Table B-1). Programs having less than ninety percent of graduates reporting being employed, continuing their education or both are identified in the following table.

Program	Numerator/ Denominator	Percent	Number Not Seeking Employment	Numerator/ Adjusted Denominator	Adjusted Percent
Funeral Services and Mortuary Science	11/15	73.3	2	11/13	84.6
Library Assistant	32/36	88.9	4	32/32	100.0
Lithographer and Platemaker	20/25	80.0	1	20/24	83.3
Desktop Publishing Equipment Operator	53/67	79.1	7	53/60	88.3
Machinist/Machine Technologist	11/13	84.6	1	11/12	91.7
Sheet Metal Worker	8/9	88.9	0	8/9	88.9
Tool and Die Maker/Technologist	22/26	84.6	0	22/26	84.6
Welder/Welding Technologist	92/109	84.4	3	92/106	86.8
Accounting Technician	190/224	84.8	10	190/214	88.8

The table includes additional information showing those who responded to both the education and employment questions and indicated that they are not actively seeking employment. The adjusted figures noted above represent combinations of variables that are not present in a single appendix table. Improvement was noted in all cases as at least one individual in every listed program was not seeking employment. Both percentages cited provide useful information. Colleges provide education and training services to students and intend for completers to either enter the workplace or continue their training. Hence, the first percentage is of interest. However, individuals also can and do decide for their own reasons (personal, family, health, other) to postpone employment or education plans and programs have little if any control over those decisions. Hence, the adjusted percentage is also meaningful.

The percent of graduates employed in areas unrelated to their field of study due to an inability to find employment in their field of study was relatively low (9.4 percent of employed graduates) but warrants additional review because this percent is 3.1 percent higher than that of FY 1997 graduates (6.3 percent). These individuals reported being employed which indicates a degree of skill transference that allowed for employment, even though it was not in their chosen field. Additional follow-up efforts at the local level are recommended with those graduates reporting that their unrelated employment was due to an inability to find a position in the field. There can be a variety of reasons for this situation including an unwillingness or inability to relocate, a tight local labor market and/or limited local demand for workers in a specific field, etc. The best way to find out is through direct personal contact. It is worth the effort to follow-up with each of these individuals to

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inquire about their need and desire for additional assistance from college officials in locating employment in the field. At the state level there were four programs with more than a handful of graduates who indicated that they could not find a job in the field of study. These programs included Computer-aided Design, Desktop Publishing Equipment Operator, Design and Visual Communications, and Accounting Technician (Table B-6).

As depicted in Figure 23, salaries for recent community college graduates were generally competitive with available comparative information (programs included are those for which comparative information was available). The primary source of comparative data is the state average or state median from the *Career Information System* (2003). The *Occupational Outlook Handbook* (2002-2003) was used to reference national averages when state information was not available. All data sources acknowledge that earnings data can be expected to vary by locality with both pay and cost of living generally higher in more urbanized areas. Likewise, longevity of employment contributes to higher earnings. The comparative sources are for all workers. Overall, salaries for recent community college graduates were competitive with available comparative information.

A total of 10 programs were eliminated from this year's report due to the limited number of reported graduates from the colleges and/or low number of responses to the follow-up survey. The numbers of reported graduates generally contributes to programs falling below the minimum number of responses required for inclusion in the report. In an era of increased accountability, fully capturing and reporting completers through the Annual Enrollment and Completion Submission (A1) is becoming increasingly important. Graduates from designated programs in the A1 submission form the basis for the Career and Technical Education Follow-up Study. Moreover, to promote student success each student's achievement should be recognized as it is accomplished. There are individuals attending community colleges who meet certificate and sometimes even degree requirements but either do not recognize that they have done so or do not file the necessary paperwork to receive their formal award and recognition.

Recommendations: As a result of the findings in the *Follow-up Study of Fiscal Year 2002 Career and Technical Education Program Graduates*, the following is recommended:

1. *Recommendation: To recognize and promote student success, College officials are encouraged to continue implementing, developing, and refining computerized automated degree and certificate audit systems.*

2. *Recommendation: Colleges are encouraged to offer graduates who when surveyed were not able to locate a position with additional assistance in their job search activities. These are challenging economic times to be in the job market and some graduates may require more assistance than usual in locating suitable employment.*

3. *Recommendation: Colleges with follow-up study response rates below recommended levels should put forth additional effort to increase response rates for the coming year. Recommended response rate levels are 50 percent for programs with 30 or more completers and 60 percent for those with fewer graduates.*

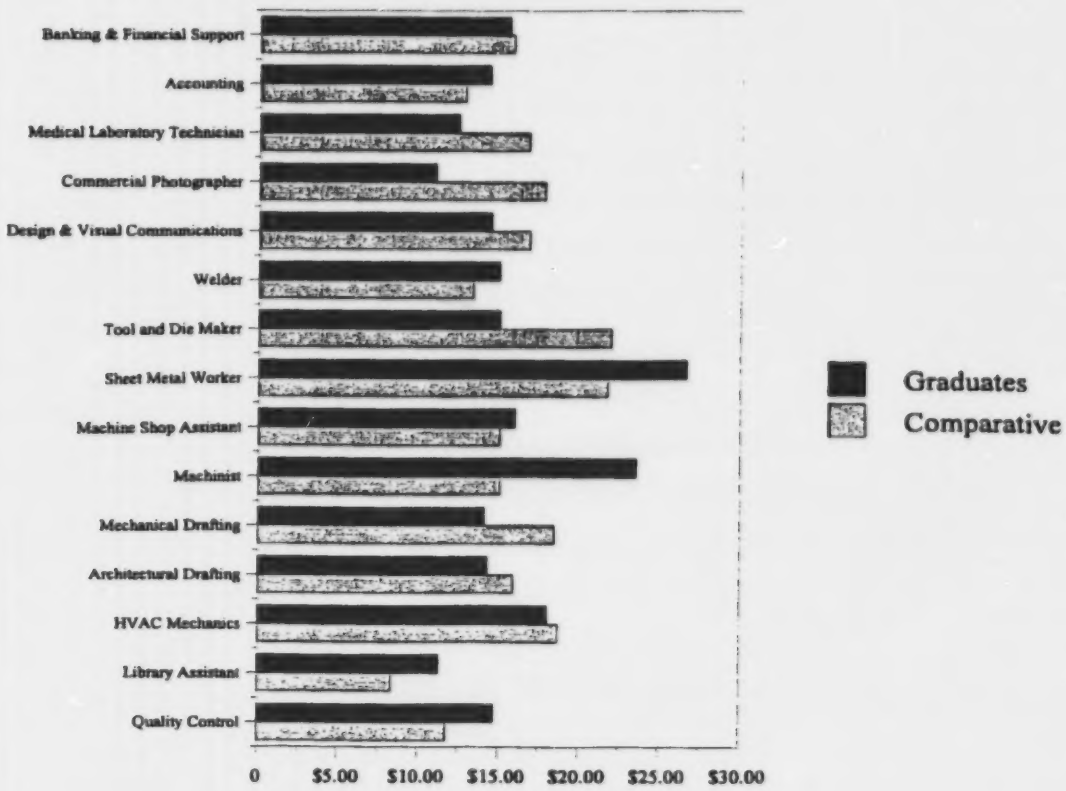

Figure 23. 2002 Community College Graduate Full-time Hourly Wages and Comparative Earnings Figures

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BIBLIOGRAPHY

American Association of Community Colleges (2003). Q&A with Jerry Jasinowski, National Association of Manufacturers. http://www.aacc.nche.edu/Template.cfm?Section=Journal_Articles&tempate=/ContentManagement/ContentDisplay.cfm&ContentID=10959InterestCategoryID=217&Name=Journal%20Article&ComingFrom=InterestDisply.

Engineering & Systems Sciences (2003). Manufacturing Engineering with Management Science Engineering (TR038). http://www.tcd.ie/Senior.Lecturer/Admissions/courses/day/esengmems.html.

Illinois Community College Board. (1998). *Follow-up Study of Students Completing Selected Occupational Programs in Fiscal Year 1997.* Springfield, Illinois.

Illinois Department of Employment Security. (2003). Career Information System. Springfield, Illinois: http://www.ilworkinfo.com/icrn.htm.

Illinois Department of Employment Security. (2003). Labor and Market Information Source. Springfield, Illinois: http://lmi.ides.state.il.us/laus/lausm.htm.

IMA-Net (2003). Illinois Manufacturers Commend President's Recognition of Manufacturing Importance. http://www.ima-net.org/news/story.cfm?ID=406.

IMA-Net (2003). *Nation's Strength Depends on Vital Manufacturing Sector.* http://www.ima-net.org/news/story.cfm?ID=403.

Job Outlook (2003). *Finding a Job is Your First Job.* http://www.jobweb.com/joboutlook/default.cfm.

Journalism Jobs.com. (2003). *Media Layoffs.* http://www.journalismjobs.com/layoffs.cfm.

Sacramento Business Journal (2002). *Post-September 11 Job Losses Greatest in Travel History.* http://sacramento.bizjournals.com/sacramento/stories/2002/04/15/daily44.html.

SFGate.com (2002). *Retail Job Cuts This Year Could be the Worst in at Least Two Decades.* http://www.sfgate.com/cgi-bin/article.cgi?f=/n/a/2002/04/04/financial1640EST0260.DTL&nl=biz.

Mechanical Engineering.com (2003). *Mechanical Engineers.* http://www.mechanicalengineer.com/oohinfo.htm#Outlook.

U.S. Department of Labor. (2003). America's Labor Market Information System CareerOneStop portal, *America's Career InfoNet*: http://www.acinet.org.

U.S Department of Labor. (2003). Bureau of Labor Statistics. (2001-2002). *Occupational Outlook Handbook 2002-2003 Edition.* Washington, D.C.: http://stats.bls.gov/ocohome.htm.

U.S. Department of Labor. (2003). Bureau of Labor Statistics, "*States at a Glance*" (Illinois): http://www.bls.gov/eag/eag.il.htm.

U.S. Department of Labor. (2003). *Employment Standards Administration Wage and Hour Division, "Minimum Wage Laws in the States*" (Illinois): http://www.dol.gov/esa/minwage/america.htm.

Yahoo!News (2002). *Global Economy – World Manufacturing Contracted in Nov.* http://in.news.yahoo.com/021202/137/1yqh1.html.

Appendix A

FOLLOW-UP STUDY OVERVIEW TABLES FOR SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

Illinois Community College Board

Table A-1

FOLLOW-UP STUDY SUMMARY BY COLLEGE FOR SELECTED PROGRAMS

Dist. No.	District/College	Number Programs Surveyed*	Number Surveyed*	Number Responding	Percent Responding	Percent Employed or Cont Ed	Percent Employed	Percent Continuing Education	Satisfaction with Program**
503	Black Hawk	7	26	18	69.2 %	83.3 %	72.2 %	22.2 %	4.4
508	Chicago	(20)	(207)	(106)	(51.2)	(80.2)	(67.1)	(28.4)	(4.0)
06	Daley	3	52	30	57.7	84.0	70.4	20.0	3.7
01	Kennedy-King	3	37	17	45.9	80.0	60.0	46.7	3.6
03	Malcolm X	3	28	20	71.4	73.3	60.0	40.0	3.9
05	Olive-Harvey	1	1	1	100.0	100.0	0.0	100.0	4.8
04	Truman	3	18	5	27.8	100.0	75.0	25.0	3.7
02	Washington	2	8	5	62.5	40.0	40.0	0.0	4.2
07	Wright	5	63	28	44.4	87.5	83.3	18.8	4.3
507	Danville	3	20	12	60.0	66.7	66.7	0.0	4.6
502	DuPage	11	267	165	61.8	88.5	80.0	36.4	4.3
509	Elgin	9	134	69	51.5	94.2	89.9	33.3	4.4
512	Harper	6	92	65	70.7	82.5	82.5	23.7	4.5
540	Heartland	2	6	2	33.3	100.0	100.0	0.0	3.5
519	Highland	2	10	6	60.0	100.0	100.0	16.7	4.4
514	Illinois Central	13	72	41	56.9	90.2	80.5	34.1	4.3
529	Illinois Eastern	(8)	(62)	(46)	(74.2)	(91.3)	(84.8)	(19.6)	(4.2)
04	Frontier	1	6	6	100.0	100.0	100.0	33.3	4.2
01	Lincoln Trail	4	26	20	76.9	90.0	85.0	15.0	4.1
02	Olney Central	2	22	14	63.6	85.7	78.6	14.3	4.2
03	Wabash Valley	1	8	6	75.0	100.0	83.3	33.3	4.1
513	Illinois Valley	4	25	15	60.0	100.0	100.0	46.7	4.3
525	Joliet	5	28	16	57.1	93.8	81.3	50.0	3.9
520	Kankakee	7	30	16	53.3	93.8	87.5	31.3	4.1
501	Kaskaskia	3	8	7	87.5	83.3	85.7	0.0	4.5
523	Kishwaukee	4	11	8	72.7	87.5	87.5	12.5	4.3
532	Lake County	11	140	77	55.0	87.0	83.1	28.6	4.4
517	Lake Land	4	35	21	60.0	85.7	85.7	9.5	4.3
536	Lewis & Clark	6	39	36	92.3	100.0	97.1	20.0	4.6
526	Lincoln Land	3	22	15	68.2	92.9	93.3	21.4	4.3
530	Logan	30	31	22	71.0	100.0	72.7	45.5	4.5
528	McHenry	4	7	4	57.1	100.0	100.0	25.0	3.9
524	Moraine Valley	11	73	47	64.4	93.6	83.0	29.8	4.5
527	Morton	3	14	11	78.6	100.0	100.0	0.0	4.1
535	Oakton	10	70	35	50.0	88.2	77.1	23.5	3.9
505	Parkland	4	29	21	72.4	81.0	81.0	23.8	4.3
515	Prairie State	8	36	18	50.0	88.9	61.1	33.3	4.1
521	Rend Lake	5	28	14	50.0	100.0	92.9	21.4	4.2
537	Richland	4	17	16	94.1	100.0	93.8	25.0	4.5
511	Rock Valley	8	64	35	54.7	85.7	80.0	17.1	4.1
518	Sandburg	5	35	21	60.0	76.2	71.4	23.8	3.9
506	Sauk Valley	6	29	18	62.1	94.4	77.8	38.9	4.3
531	Shawnee	—	—	—	—	—	—	—	—
510	South Suburban	6	26	20	76.9	95.0	85.0	40.0	4.1
533	Southeastern	2	5	5	100.0	60.0	60.0	20.0	4.7
522	Southwestern	11	233	120	51.5	87.3	83.3	12.7	4.4
534	Spoon River	—	—	—	—	—	—	—	—
504	Triton	13	83	36	43.4	86.1	83.3	13.9	4.2
516	Waubonsee	6	37	25	67.6	92.0	92.0	40.0	4.1
539	Wood	2	5	5	100.0 %	80.0 %	80.0 %	20.0 %	4.2
	TOTALS	266	2,056	1,214	59.0 %	88.8 %	82.0 %	26.5 %	4.3

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study.

*Selected programs reviewed in report only, excludes correctional students.
** Based on a scale of 1-5; 1 - Very Dissatisfied, 5 - Very Satisfied.

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Illinois Community College Board

Table A-2

FOLLOW-UP STUDY RESPONSE RATES BY PROGRAM

CIP	Title	Number of Respondents	Number of Non-respondents	Number of Completers Surveyed*	Response Rate
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	17	13	30	56.7
120301	Funeral Services and Mortuary Science	17	13	30	56.7
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	17	6	23	73.9
150702	Quality Control Technology/Technician	17	6	23	73.9
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	158	151	309	51.1
150805	Mechanical Engineering/Mechanical Technology/Technician	21	15	36	58.3
150810	Computer-aided Design	137	136	273	50.2
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	30	10	40	75.0
200501	Home Furnishings and Equipment Installers and Consultants, General	30	10	40	75.0
2503	LIBRARY ASSISTANT	36	20	56	64.3
250301	Library Assistant	36	20	56	64.3
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPAIRERS	153	119	272	56.3
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	153	119	272	56.3
4801	DRAFTING	60	33	93	64.5
480102	Architectural Drafting	30	27	57	52.6
480105	Mechanical Drafting	30	6	36	83.3
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	94	63	157	59.9
480206	Lithographer and Platemaker	27	27	54	50.0
480212	Desktop Publishing Equipment Operator	67	36	103	65.0
4805	PRECISION METAL WORKERS	220	178	398	55.3
480501	Machinist/Machine Technologist	13	23	36	36.1
480503	Machine Shop Assistant	61	30	91	67.0
480506	Sheet Metal Worker	9	8	17	52.9
480507	Tool and Die Maker/Technologist	26	23	49	53.1
480508	Welder/Welding Technologist	111	94	205	54.1
5004	DESIGN AND APPLIED ART	98	76	174	56.3
500401	Design and Visual Communications	84	71	155	54.2
500406	Commercial Photography	14	5	19	73.7
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	82	49	131	62.6
511004	Medical Laboratory Technician	82	49	131	62.6
5203	ACCOUNTING	237	120	357	66.4
520302	Accounting Technician	237	120	357	66.4
5208	FINANCIAL MANAGEMENT SERVICES	12	4	16	75.0
520803	Banking and Financial Support Services	12	4	16	75.0
	Total Statewide Report	1,214	842	2,056	59.0
	Total Surveyed	1,241	861	2,102	59.0

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study.

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Appendix B

STATEWIDE FOLLOW-UP STUDY TABLES FOR SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS BY CLASSIFICATION OF INSTRUCTIONAL PROGRAM CODE

Illinois Community College Board

Table B-1

EMPLOYMENT AND EDUCATION STATUS OF PROGRAM COMPLETERS
IN SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	EMPLOYED AND NOT PURSUING ADDITIONAL EDUCATION		PURSUING ADDITIONAL EDUCATION AND NOT EMPLOYED		EMPLOYED AND PURSUING ADDITIONAL EDUCATION		TOTAL GRADUATES EMPLOYED OR PURSUING ADDITIONAL EDUCATION OR BOTH		TOTAL NUMBER RESPONDING
		NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	6	54.5 %	1	9.1 %	4	36.4 %	11	73.3 %	15
120301	Funeral Services and Mortuary Science	6	0.0	1	9.1	4	36.4	11	73.3	15
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	13	81.3	0	0.0	3	18.8	16	94.1	17
150702	Quality Control Technology/Technician	13	81.3	0	0.0	3	18.8	16	94.1	17
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	98	68.1	6	4.2	40	27.8	144	92.3	156
150805	Mechanical Engineering/Mechanical Technology/Technician	9	47.4	1	5.3	9	47.4	19	90.5	21
150810	Computer-aided Design	89	71.2	5	4.0	31	24.8	125	92.6	135
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	20	76.9	0	0.0	6	23.1	26	89.7	29
200501	Home Furnishings and Equipment Installers and Consultants, General	20	76.9	0	0.0	6	23.1	26	89.7	29
2503	LIBRARY ASSISTANT	29	90.6	1	3.1	2	6.3	32	88.9	36
250301	Library Assistant	29	90.6	1	3.1	2	6.3	32	88.9	36
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND RI	97	68.8	11	7.8	33	23.4	141	94.0	150
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	97	68.8	11	7.8	33	23.4	141	94.0	150
4801	DRAFTING	34	64.2	3	5.7	16	30.2	53	93.0	57
480102	Architectural Drafting	14	56.0	2	8.0	9	36.0	25	89.3	28
480105	Mechanical Drafting	20	71.4	1	3.6	7	25.0	28	96.6	29
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	50	68.5	7	9.6	16	21.9	73	79.3	92
480206	Lithographer and Platemaker	14	70.0	3	15.0	3	15.0	20	80.0	25
480212	Desktop Publishing Equipment Operator	36	67.9	4	7.6	13	24.5	53	79.1	67
4805	PRECISION METAL WORKERS	148	80.0	8	4.3	29	15.7	185	86.0	215
480501	Machinist/Machine Technologist	11	100.0	0	0.0	0	0.0	11	84.6	13
480503	Machine Shop Assistant	39	75.0	3	5.8	10	19.2	52	89.7	58
480508	Sheet Metal Worker	8	100.0	0	0.0	0	0.0	8	88.9	9
480507	Tool and Die Maker/Technologist	15	68.2	1	4.5	6	27.3	22	84.6	26
480508	Welder/Welding Technologist	75	81.5	4	4.3	13	14.1	92	84.4	109
5004	DESIGN AND APPLIED ART	51	55.4	16	17.4	25	27.2	92	93.9	98
500401	Design and Visual Communications	47	59.5	13	16.5	19	24.1	79	94.0	84
500406	Commercial Photography	4	30.8	3	23.1	6	46.2	13	92.9	14
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	46	66.7	7	10.1	16	23.2	69	93.2	74
511004	Medical Laboratory Technician	46	66.7	7	10.1	16	23.2	69	93.2	74
5203	ACCOUNTING	131	68.9	19	10.0	40	21.1	190	84.8	224
520302	Accounting Technician	131	68.9	19	10.0	40	21.1	190	84.8	224
5206	FINANCIAL MANAGEMENT SERVICES	9	90.0	0	0.0	1	10.0	10	90.9	11
520803	Banking and Financial Support Services	9	90.0 %	0	0.0 %	1	10.0 %	10	90.9 %	11
	Associate Degree	337	72.8 %	33	7.1 %	93	20.1 %	463	91.0 %	509
	Advanced Certificate (30 hours or more)	130	66.7 %	19	9.7 %	46	23.6 %	195	85.2 %	229
	Basic Certificate (Less than 30 hours)	265	69.0 %	27	7.0 %	92	24.0 %	384	88.1 %	436
	Report Total/Average	732	70.2 %	79	7.6 %	231	22.2 %	1,042	88.8 %	1,174

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study

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Table B-2

EMPLOYMENT PATTERNS OF PROGRAM COMPLETERS
IN SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	EMPLOYED FULL-TIME		EMPLOYED PART-TIME		UNEMPLOYED SEEKING EMPLOYMENT		UNEMPLOYED NOT SEEKING EMPLOYMENT		TOTAL RESPONDING	TOTAL EMPLOYED	
		NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	NUMBER	PERCENT
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	7	70.0 %	3	30.0 %	3	20.0 %	2	13.3 %	15	10	66.7 %
120301	Funeral Services and Mortuary Science	7	70.0	3	30.0	3	20.0	2	13.3	15	10	66.7
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	15	93.8	1	6.3	0	0.0	1	5.9	17	16	94.1
150702	Quality Control Technology/Technician	15	93.8	1	6.3	0	0.0	1	5.9	17	16	94.1
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	114	82.6	24	17.4	10	6.4	8	5.1	156	138	88.6
150805	Mechanical Engineering/Mechanical Technology/Technician	14	77.8	4	22.2	1	4.8	2	9.5	21	18	85.7
150810	Computer-aided Design	100	83.3	20	16.7	9	6.7	6	4.4	135	120	88.9
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	19	73.1	7	26.9	1	3.4	2	6.9	29	26	89.7
200501	Home Furnishings and Equipment Installers and Consultants, General	19	73.1	7	26.9	1	3.4	2	6.9	29	26	89.7
2503	LIBRARY ASSISTANT	24	77.4	7	22.6	0	0.0	5	13.9	36	31	86.1
250301	Library Assistant	24	77.4	7	22.6	0	0.0	5	13.9	36	31	86.1
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND F	120	90.2	13	9.8	11	7.2	9	5.9	153	133	86.9
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	120	90.2	13	9.8	11	7.2	9	5.9	153	133	86.9
4801	DRAFTING	45	88.2	6	11.8	6	10.3	1	1.7	58	51	87.9
480102	Architectural Drafting	21	87.5	3	12.5	5	17.2	0	0.0	29	24	82.8
480105	Mechanical Drafting	24	88.9	3	11.1	1	3.4	1	3.4	29	27	93.1
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	46	69.7	20	30.3	14	18.2	12	13.0	92	66	71.7
480208	Lithographer and Platemaker	14	82.4	3	17.6	5	20.0	3	12.0	25	17	68.0
480212	Desktop Publishing Equipment Operator	32	65.3	17	34.7	9	13.4	9	13.4	67	49	73.1
4805	PRECISION METAL WORKERS	184	92.1	14	7.9	32	14.6	9	4.1	219	178	81.3
480501	Machinist/Machine Technologist	11	100.0	0	0.0	1	7.7	1	7.7	13	11	84.6
480503	Machine Shop Assistant	48	98.0	1	2.0	7	11.7	4	6.7	60	49	81.7
480506	Sheet Metal Worker	8	100.0	0	0.0	1	11.1	0	0.0	9	8	88.9
480507	Tool and Die Maker/Technologist	17	81.0	4	19.0	5	19.2	0	0.0	26	21	80.8
480508	Welder/Welding Technologist	80	89.9	9	10.1	18	16.2	4	3.6	111	89	80.2
5004	DESIGN AND APPLIED ART	49	64.5	27	35.5	8	8.2	14	14.3	98	76	77.6
500401	Design and Visual Communications	42	63.6	24	36.4	8	9.5	10	11.9	84	66	78.6
500406	Commercial Photography	7	70.0	3	30.0	0	0.0	4	28.6	14	10	71.4
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	52	81.3	12	18.8	3	3.9	9	11.8	76	64	84.2
511004	Medical Laboratory Technician	52	81.3	12	18.8	3	3.9	9	11.8	76	64	84.2
5203	ACCOUNTING	151	85.8	25	14.2	35	16.3	18	7.9	229	176	76.9
520302	Accounting Technician	151	85.8	25	14.2	35	16.3	18	7.9	229	176	76.9
5208	FINANCIAL MANAGEMENT SERVICES	10	90.9	1	9.1	1	8.3	0	0.0	12	11	91.7
520803	Banking and Financial Support Services	10	90.9 %	1	9.1 %	1	8.3 %	0	0.0 %	12	11	91.7 %
	Associate Degree	354	81.8 %	79	18.2 %	46	9.0 %	33	6.4 %	512	433	84.6 %
	Advanced Certificate (30 hours or more)	155	87.6 %	22	12.4 %	32	13.9 %	22	9.5 %	231	177	76.6 %
	Basic Certificate (Less than 30 hours)	307	83.9 %	59	16.1 %	46	10.3 %	35	7.8 %	447	366	81.9 %
	Report Total/Average	816	83.6 %	160	16.4 %	124	10.4 %	90	7.6 %	1,190	976	82.0 %

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study

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Table B-3

GRADUATES SIMULTANEOUSLY EMPLOYED AND PURSUING ADDITIONAL EDUCATION
IN SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	EMPLOYED AND PURSUING ADDITIONAL EDUCATION IN A RELATED FIELD		EMPLOYED AND PURSUING ADDITIONAL EDUCATION IN AN UNRELATED FIELD		TOTAL GRADUATES EMPLOYED AND PURSUING ADDITIONAL EDUCATION		TOTAL GRADUATES RESPONDING
		NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	1	25.0 %	3	75.0 %	4	26.7 %	15
120301	Funeral Services and Mortuary Science	1	25.0	3	75.0	4	26.7	15
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	3	100.0	0	0.0	3	17.6	17
150702	Quality Control Technology/Technician	3	100.0	0	0.0	3	17.6	17
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	28	70.0	12	30.0	40	29.6	156
150805	Mechanical Engineering/Mechanical Technology/Technician	7	77.8	2	22.2	9	42.9	21
150810	Computer-aided Design	21	67.7	10	32.3	31	23.0	135
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	6	100.0	0	0.0	6	20.7	29
200501	Home Furnishings and Equipment Installers and Consultants, General	6	100.0	0	0.0	6	20.7	29
2503	LIBRARY ASSISTANT	2	100.0	0	0.0	2	5.6	36
250301	Library Assistant	2	100.0	0	0.0	2	5.6	36
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND RE	26	78.8	7	21.2	33	22.0	150
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	26	78.8	7	21.2	33	22.0	150
*4801	DRAFTING	13	81.3	3	18.8	16	28.1	57
480102	Architectural Drafting	7	77.8	2	22.2	9	32.1	28
480105	Mechanical Drafting	6	85.7	1	14.3	7	24.1	29
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	11	68.8	5	31.3	16	17.4	92
480206	Lithographer and Platemaker	1	33.3	2	66.7	3	12.0	25
480212	Desktop Publishing Equipment Operator	10	76.9	3	23.1	13	19.4	67
4805	PRECISION METAL WORKERS	22	75.9	7	24.1	29	13.5	215
480501	Machinist/Machine Technologist	0	—	0	—	0	0.0	13
480503	Machine Shop Assistant	8	80.0	2	20.0	10	17.2	58
480506	Sheet Metal Worker	0	—	0	—	0	0.0	9
480507	Tool and Die Maker/Technologist	4	66.7	2	33.3	6	23.1	26
480508	Welder/Welding Technologist	10	76.9	3	23.1	13	11.9	109
5004	DESIGN AND APPLIED ART	22	88.0	3	12.0	25	26.6	98
500401	Design and Visual Communications	16	84.2	3	15.8	19	22.6	84
500406	Commercial Photography	6	100.0	0	0.0	6	42.9	14
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	8	50.0	8	50.0	16	21.6	74
511004	Medical Laboratory Technician	8	50.0	8	50.0	16	21.6	74
5203	ACCOUNTING	34	85.0	6	15.0	40	17.9	224
520302	Accounting Technician	34	85.0	6	15.0	40	17.9	224
5208	FINANCIAL MANAGEMENT SERVICES	1	100.0	0	0.0	1	9.1	11
520803	Banking and Financial Support Services	1	100.0 %	0	0.0 %	1	9.1 %	11
	Associate Degree	69	74.2 %	24	25.8 %	93	18.3 %	509
	Advanced Certificate (30 hours or more)	37	80.4 %	9	19.6 %	46	20.1 %	229
	Basic Certificate (Less than 30 hours)	71	77.2 %	21	22.8 %	92	21.1 %	436
	Report Total/Average	177	76.6 %	54	23.4 %	231	19.7 %	1,174

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study.

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Table B-4

EDUCATIONAL STATUS OF GRADUATES
IN SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	NO FURTHER EDUCATION NUMBER	NO FURTHER EDUCATION PERCENT	PREVIOUSLY PURSUED FURTHER EDUCATION BUT NOT NOW NUMBER	PREVIOUSLY PURSUED FURTHER EDUCATION BUT NOT NOW PERCENT	CURRENTLY ENROLLED IN RELATED PROGRAM NUMBER	CURRENTLY ENROLLED IN RELATED PROGRAM PERCENT	CURRENTLY ENROLLED IN UNRELATED PROGRAM NUMBER	CURRENTLY ENROLLED IN UNRELATED PROGRAM PERCENT	TOTAL RESPONDING NUMBER	COMBINED COUNT CURRENTLY ENROLLED IN RELATED AND UNRELATED PROGRAMS NUMBER	COMBINED COUNT CURRENTLY ENROLLED IN RELATED AND UNRELATED PROGRAMS PERCENT
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	7	46.7 %	3	20.0 %	1	6.7 %	4	26.7 %	15	5	33.3 %
120301	Funeral Services and Mortuary Science	7	46.7	3	20.0	1	6.7	4	26.7	15	5	33.3
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	12	70.6	2	11.8	3	17.6	0	0.0	17	3	17.6
150702	Quality Control Technology/Technician	12	70.6	2	11.8	3	17.6	0	0.0	17	3	17.6
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	94	64.1	15	10.2	34	21.7	13	8.3	157	47	29.9
150805	Mechanical Engineering/Mechanical Technology/Technician	9	42.9	2	9.5	8	38.1	2	9.5	21	10	47.6
150810	Computer-aided Design	85	69.1	14	10.3	26	19.1	11	8.1	136	37	27.2
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	22	73.3	1	3.3	7	23.3	0	0.0	30	7	23.3
200501	Home Furnishings and Equipment Installers and Consultants, General	22	73.3	1	3.3	7	23.3	0	0.0	30	7	23.3
2503	LIBRARY ASSISTANT	29	80.6	4	11.1	3	8.3	0	0.0	36	3	8.3
250301	Library Assistant	29	80.6	4	11.1	3	8.3	0	0.0	36	3	8.3
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPA	96	64.0	10	6.7	33	22.0	11	7.3	150	44	29.3
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	96	64.0	10	6.7	33	22.0	11	7.3	150	44	29.3
4801	DRAFTING	32	56.1	6	10.5	16	28.1	3	5.3	57	19	33.3
480102	Architectural Drafting	16	57.1	1	3.6	9	32.1	2	7.1	28	11	39.3
480105	Mechanical Drafting	16	55.2	5	17.2	7	24.1	1	3.4	29	8	27.6
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	65	70.7	4	4.3	16	17.4	7	7.6	92	23	25.0
480208	Lithographer and Platemaker	18	72.0	1	4.0	4	16.0	2	8.0	25	6	24.0
480212	Desktop Publishing Equipment Operator	47	70.1	3	4.5	12	17.9	5	7.5	67	17	25.4
4805	PRECISION METAL WORKERS	167	77.7	11	5.1	28	13.0	9	4.2	215	37	17.2
480501	Machinist/Machine Technologist	11	84.6	2	15.4	0	0.0	0	0.0	13	0	0.0
480503	Machine Shop Assistant	43	74.1	2	3.4	10	17.2	3	5.2	58	13	22.4
480508	Sheet Metal Worker	9	100.0	0	0.0	0	0.0	0	0.0	9	0	0.0
480507	Tool and Die Maker/Technologist	17	65.4	2	7.7	5	19.2	2	7.7	26	7	26.9
480508	Welder/Welding Technologist	87	79.8	5	4.6	13	11.9	4	3.7	109	17	15.6
5004	DESIGN AND APPLIED ART	44	44.9	13	13.3	38	38.8	3	3.1	98	41	41.8
500401	Design and Visual Communications	39	48.4	13	16.5	29	34.5	3	3.6	84	32	38.1
500406	Commercial Photography	5	35.7	0	0.0	9	64.3	0	0.0	14	9	64.3
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	44	59.5	7	9.5	14	18.9	9	12.2	74	23	31.1
511004	Medical Laboratory Technician	44	59.5	7	9.5	14	18.9	9	12.2	74	23	31.1
5203	ACCOUNTING	154	68.4	12	5.3	49	21.8	10	4.4	225	59	26.2
520302	Accounting Technician	154	68.4	12	5.3	49	21.8	10	4.4	225	59	26.2
5208	FINANCIAL MANAGEMENT SERVICES	10	90.9	0	0.0	1	9.1	0	0.0	11	1	9.1
520803	Banking and Financial Support Services	10	90.9 %	0	0.0 %	1	9.1 %	0	0.0 %	11	1	9.1 %
	Associate Degree	339	66.3 %	44	8.6 %	97	19.0 %	31	6.1 %	511	128	26.0 %
	Advanced Certificate (30 hours or more)	151	66.9 %	13	5.7 %	53	23.1 %	12	5.2 %	229	65	28.4 %
	Basic Certificate (Less than 30 hours)	280	66.4 %	32	7.3 %	93	21.3 %	26	6.0 %	437	119	27.2 %
	Report Total/Average	770	66.9 %	89	7.6 %	243	20.6 %	69	6.9 %	1,177	312	26.6 %

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study

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Table B-8

RELATEDNESS OF EMPLOYMENT AMONG PROGRAM COMPLETERS IN SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	EMPLOYED FULL-TIME		EMPLOYED PART-TIME		COMBINED				
		RELATED	NOT RELATED	RELATED	NOT RELATED	RELATED		NOT RELATED		TOTAL
		NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	RESPONDING
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	5	2	3	0	8	80.0 %	2	20.0 %	10
120301	Funeral Services and Mortuary Science	5	2	3	0	8	80.0	2	20.0	10
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	13	2	1	0	14	87.5	2	12.5	16
150702	Quality Control Technology/Technician	13	2	1	0	14	87.5	2	12.5	16
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	83	28	12	12	95	70.4	40	29.6	135
150805	Mechanical Engineering/Mechanical Technology/Technician	10	4	3	1	13	72.2	5	27.8	18
150810	Computer-aided Design	73	24	9	11	82	70.1	35	29.9	117
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTAN	16	3	5	2	21	80.8	5	19.2	26
200501	Home Furnishings and Equipment Installers and Consultants, General	16	3	5	2	21	80.8	5	19.2	26
2503	LIBRARY ASSISTANT	20	4	6	1	26	83.9	5	16.1	31
250301	Library Assistant	20	4	6	1	26	83.9	5	16.1	31
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND	101	19	7	6	108	81.2	25	18.8	133
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	101	19	7	6	108	81.2	25	18.8	133
4801	DRAFTING	31	13	3	3	34	68.0	16	32.0	50
480102	Architectural Drafting	13	7	2	1	15	65.2	8	34.8	23
480105	Mechanical Drafting	18	6	1	2	19	70.4	8	29.6	27
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	26	18	11	9	37	57.8	27	42.2	64
480206	Lithographer and Platemaker	7	7	1	2	8	47.1	9	52.9	17
480212	Desktop Publishing Equipment Operator	19	11	10	7	29	61.7	18	38.3	47
4805	PRECISION METAL WORKERS	120	42	7	7	127	72.2	49	27.8	176
480501	Machinist/Machine Technologist	10	1	0	0	10	90.9	1	9.1	11
480503	Machine Shop Assistant	34	14	0	1	34	69.4	15	30.6	49
480506	Sheet Metal Worker	6	0	0	0	6	100.0	0	0.0	6
480507	Tool and Die Maker/Technologist	16	1	3	1	19	90.5	2	9.5	21
480508	Welder/Welding Technologist	52	26	4	5	56	64.4	31	35.6	87
5004	DESIGN AND APPLIED ART	30	19	15	11	45	60.0	30	40.0	75
500401	Design and Visual Communications	26	16	14	9	40	61.5	25	38.5	65
500406	Commercial Photography	4	3	1	2	5	50.0	5	50.0	10
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	40	12	9	3	49	76.6	15	23.4	64
511004	Medical Laboratory Technician	40	12	9	3	49	76.6	15	23.4	64
5203	ACCOUNTING	107	34	15	10	122	73.5	44	26.5	166
520302	Accounting Technician	107	34	15	10	122	73.5	44	26.5	166
5208	FINANCIAL MANAGEMENT SERVICES	8	2	1	0	9	81.8	2	18.2	11
520803	Banking and Financial Support Services	8	2	1	0	9	81.8 %	2	18.2 %	11
	Associate Degree	259	82	49	29	308	73.5 %	111	26.5 %	419
	Advanced Certificate (30 hours or more)	121	32	11	11	132	75.4 %	43	24.6 %	175
	Basic Certificate (Less than 30 hours)	220	84	35	24	255	70.2 %	108	29.8 %	363
	Report Total/Average	600	198	95	64	695	72.6 %	262	27.4 %	957

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study.

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Table B-6

REASONS WHY PRESENT JOB IS NOT in RELATED FIELD
FOR GRADUATES OF CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	Reason Why Job is not in a Related Field*										Not Indicated	Total Employed in Unrelated Field
		1	2	3	4	5	6	7	8	9	10		
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	0	0	1	0	0	0	0	1	0	0	0	2
120301	Funeral Services and Mortuary Science	0	0	1	0	0	0	0	1	0	0	0	2
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	0	0	1	0	0	1	0	0	0	0	0	2
150702	Quality Control Technology/Technician	0	0	1	0	0	1	0	0	0	0	0	2
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	4	3	14	3	1	4	2	2	0	3	4	40
150805	Mechanical Engineering/Mechanical Technology/Technician	0	1	3	0	0	0	0	0	0	1	0	5
150810	Computer-aided Design	4	2	11	3	1	4	2	2	0	2	4	35
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	0	0	1	0	0	1	0	0	0	2	1	5
200501	Home Furnishings and Equipment Installers and Consultants, General	0	0	1	0	0	1	0	0	0	2	1	5
2503	LIBRARY ASSISTANT	0	0	4	1	0	0	0	0	0	0	0	5
250301	Library Assistant	0	0	4	1	0	0	0	0	0	0	0	5
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPAIRE	2	2	4	1	2	4	0	0	1	5	4	25
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	2	2	4	1	2	4	0	0	1	5	4	25
4801	DRAFTING	3	0	2	1	0	3	0	0	0	4	3	16
480102	Architectural Drafting	2	0	0	1	0	2	0	0	0	1	2	8
480105	Mechanical Drafting	1	0	2	0	0	1	0	0	0	3	1	8
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	1	3	16	1	0	3	0	0	0	1	2	27
480208	Lithographer and Platemaker	1	1	4	1	0	1	0	0	0	0	1	9
480212	Desktop Publishing Equipment Operator	0	2	12	0	0	2	0	0	0	1	1	18
4805	PRECISION METAL WORKERS	7	5	10	1	1	4	2	1	0	7	11	49
480501	Machinist/Machine Technologist	0	0	0	0	0	0	0	0	0	0	1	1
480503	Machine Shop Assistant	3	1	4	0	0	2	2	0	0	2	1	15
480507	Tool and Die Maker/Technologist	0	0	2	0	0	0	0	0	0	0	0	2
480508	Welder/Welding Technologist	4	4	4	1	1	2	0	1	0	5	9	31
5004	DESIGN AND APPLIED ART	2	0	15	1	0	5	1	1	0	3	2	30
500401	Design and Visual Communications	2	0	13	1	0	3	1	1	0	2	2	25
500406	Commercial Photography	0	0	2	0	0	2	0	0	0	1	0	5
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	2	1	8	0	0	3	0	0	0	0	1	15
511004	Medical Laboratory Technician	2	1	8	0	0	3	0	0	0	0	1	15
5203	ACCOUNTING	4	6	14	2	1	3	4	0	0	5	5	44
520302	Accounting Technician	4	6	14	2	1	3	4	0	0	5	5	44
5308	FINANCIAL MANAGEMENT SERVICES	1	1	0	0	0	0	0	0	0	0	0	2
520803	Banking and Financial Support Services	1	1	0	0	0	0	0	0	0	0	0	2
	Associate Degree	5	11	43	5	2	14	6	1	0	11	13	111
	Advanced Certificate (30 hours or more)	5	3	14	0	2	5	2	1	1	5	5	43
	Basic Certificate (Less than 30 hours)	16	7	33	6	1	12	1	3	0	14	15	108
	REPORT TOTAL	26	21	90	11	5	31	9	5	1	30	33	262

* 1 = Preferred to work in another field
2 = Found better paying job in another field
3 = Could not find job in field of preparation
4 = Worked previously in field, but changed
5 = Preferred not to move to new locality
6 = Temporary job while in transition (in college or summer employment)
7 = Took job in order to get preferred working hours
8 = Didn't complete program or pass licensing test to be eligible to work in field
9 = Health problems prevented me from working in field
10 = Other

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study

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Table B-7

BEGINNING OF PRESENT POSITION AMONG GRADUATES IN SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	HAD POSITION PRIOR TO PROGRAM ENTRANCE NUMBER	PERCENT	BEGAN POSITION DURING PROGRAM ENROLLMENT NUMBER	PERCENT	BEGAN POSITION AFTER PROGRAM COMPLETION NUMBER	PERCENT	TOTAL NUMBER RESPONDING
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	3	30.0 %	1	10.0 %	6	60.0 %	10
120301	Funeral Services and Mortuary Science	3	30.0	1	10.0	6	60.0	10
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	7	43.8	3	18.8	6	37.5	16
150702	Quality Control Technology/Technician	7	43.8	3	18.8	6	37.5	16
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	37	28.7	48	37.2	44	34.1	129
150805	Mechanical Engineering/Mechanical Technology/Technician	4	22.2	9	50.0	5	27.8	18
150810	Computer-aided Design	33	29.7	39	35.1	39	35.1	111
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	5	19.2	10	38.5	11	42.3	26
200501	Home Furnishings and Equipment Installers and Consultants, General	5	19.2	10	38.5	11	42.3	26
2503	LIBRARY ASSISTANT	15	48.4	9	29.0	7	22.6	31
250301	Library Assistant	15	48.4	9	29.0	7	22.6	31
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPA	43	33.3	43	33.3	43	33.3	129
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	43	33.3	43	33.3	43	33.3	129
4801	DRAFTING	11	22.9	27	56.3	10	20.8	48
480102	Architectural Drafting	3	13.6	17	77.3	2	9.1	22
480105	Mechanical Drafting	8	30.8	10	38.5	8	30.8	26
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	16	24.2	26	39.4	24	36.4	66
480206	Lithographer and Platemaker	3	17.6	5	29.4	9	52.9	17
480212	Desktop Publishing Equipment Operator	13	26.5	21	42.9	15	30.6	49
4805	PRECISION METAL WORKERS	57	32.9	48	27.7	68	39.3	173
480501	Machinist/Machine Technologist	4	40.0	6	60.0	0	0.0	10
480503	Machine Shop Assistant	18	36.7	13	26.5	18	36.7	49
480505	Sheet Metal Worker	3	37.5	5	62.5	0	0.0	8
480507	Tool and Die Maker/Technologist	6	30.0	7	35.0	7	35.0	20
480508	Welder/Welding Technologist	26	30.2	17	19.8	43	50.0	86
5004	DESIGN AND APPLIED ART	19	26.4	26	36.1	27	37.5	72
500401	Design and Visual Communications	16	25.8	23	37.1	23	37.1	62
500406	Commercial Photography	3	30.0	3	30.0	4	40.0	10
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	11	17.5	14	22.2	38	60.3	63
511004	Medical Laboratory Technician	11	17.5	14	22.2	38	60.3	63
5203	ACCOUNTING	67	38.5	59	33.9	48	27.6	174
520302	Accounting Technician	67	38.5	59	33.9	48	27.6	174
5208	FINANCIAL MANAGEMENT SERVICES	3	27.3	7	63.6	1	9.1	11
520803	Banking and Financial Support Services	3	27.3 %	7	63.6 %	1	9.1 %	11
	Associate Degree	107	25.2 %	152	35.8 %	165	38.9 %	424
	Advanced Certificate (30 hours or more)	60	34.1 %	69	39.2 %	47	26.7 %	176
	Basic Certificate (Less than 30 hours)	127	36.5 %	100	28.7 %	121	34.8 %	348
	REPORT TOTAL	294	31.0 %	321	33.9 %	333	35.1 %	948

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study.

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Table B-8

LOCATION OF EMPLOYMENT HELD BY GRADUATES
FROM SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	IN-DISTRICT NUMBER	IN-DISTRICT PERCENT	OUT-OF-DISTRICT IN ILLINOIS NUMBER	OUT-OF-DISTRICT IN ILLINOIS PERCENT	OUT-OF-STATE NUMBER	OUT-OF-STATE PERCENT	TOTAL NUMBER RESPONDING
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	5	50.0 %	4	40.0 %	1	10.0 %	10
120301	Funeral Services and Mortuary Science	5	50.0	4	40.0	1	10.0	10
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	13	81.3	2	12.5	1	6.3	16
150702	Quality Control Technology/Technician	13	81.3	2	12.5	1	6.3	16
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	86	69.4	26	21.0	12	9.7	124
150805	Mechanical Engineering/Mechanical Technology/Technician	13	76.5	1	5.9	3	17.6	17
150810	Computer-aided Design	73	68.2	25	23.4	9	8.4	107
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	13	50.0	12	46.2	1	3.8	26
200501	Home Furnishings and Equipment Installers and Consultants, General	13	50.0	12	46.2	1	3.8	26
2503	LIBRARY ASSISTANT	15	48.4	16	51.6	0	0.0	31
250301	Library Assistant	15	48.4	16	51.6	0	0.0	31
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPAIRERS	87	69.6	28	22.4	10	8.0	125
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	87	69.6	28	22.4	10	8.0	125
4801	DRAFTING	33	66.0	13	26.0	4	8.0	50
480102	Architectural Drafting	16	69.6	6	26.1	1	4.3	23
480105	Mechanical Drafting	17	63.0	7	25.9	3	11.1	27
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	51	77.3	10	15.2	5	7.6	66
480206	Lithographer and Platemaker	11	64.7	4	23.5	2	11.8	17
480212	Desktop Publishing Equipment Operator	40	81.6	6	12.2	3	6.1	49
4805	PRECISION METAL WORKERS	122	70.9	33	19.2	17	9.9	172
480501	Machinist/Machine Technologist	10	90.9	0	0.0	1	9.1	11
480503	Machine Shop Assistant	25	53.2	19	40.4	3	6.4	47
480506	Sheet Metal Worker	8	100.0	0	0.0	0	0.0	8
480507	Tool and Die Maker/Technologist	19	95.0	1	5.0	0	0.0	20
480508	Welder/Welding Technologist	60	69.8	13	15.1	13	15.1	86
5004	DESIGN AND APPLIED ART	45	65.2	19	27.5	5	7.2	69
500401	Design and Visual Communications	39	66.1	15	25.4	5	8.5	59
500406	Commercial Photography	6	60.0	4	40.0	0	0.0	10
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	42	65.6	12	18.8	10	15.6	64
511004	Medical Laboratory Technician	42	65.6	12	18.8	10	15.6	64
5203	ACCOUNTING	147	85.5	21	12.2	4	2.3	172
520302	Accounting Technician	147	85.5	21	12.2	4	2.3	172
5208	FINANCIAL MANAGEMENT SERVICES	9	81.8	1	9.1	1	9.1	11
520803	Banking and Financial Support Services	9	81.8 %	1	9.1 %	1	9.1 %	11
	Associate Degree	299	71.0 %	87	20.7 %	35	8.3 %	421
	Advanced Certificate (30 hours or more)	129	75.9 %	31	18.2 %	10	5.9 %	170
	Basic Certificate (Less than 30 hours)	240	69.6 %	79	22.9 %	26	7.5 %	345
	REPORT TOTAL	668	71.4 %	197	21.0 %	71	7.6 %	936

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study.

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Table B-8

AVERAGE HOURLY SALARY EARNED BY GRADUATES FROM SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	FULL-TIME NUMBER OF RESPONDENTS	FULL-TIME AVERAGE HOURLY SALARY	PART-TIME NUMBER OF RESPONDENTS	PART-TIME AVERAGE HOURLY SALARY	TOTAL NUMBER OF RESPONDENTS	TOTAL AVERAGE HOURLY SALARY
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	6	$13.39	3	$7.42	9	$11.40
120301	Funeral Services and Mortuary Science	6	$13.39	3	$7.42	9	$11.40
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	7	$14.70	1	$10.00	8	$14.11
150702	Quality Control Technology/Technician	7	$14.70	1	$10.00	8	$14.11
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	90	$16.20	17	$9.51	107	$15.14
150805	Mechanical Engineering/Mechanical Technology/Technician	9	$20.31	4	$9.52	13	$16.99
150810	Computer-aided Design	81	$15.75	13	$9.50	94	$14.88
2006	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	11	$14.41	6	$14.58	17	$14.47
200501	Home Furnishings and Equipment Installers and Consultants, General	11	$14.41	6	$14.58	17	$14.47
2503	LIBRARY ASSISTANT	18	$11.31	5	$10.79	23	$11.20
250301	Library Assistant	18	$11.31	5	$10.79	23	$11.20
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPAIRER	100	$18.05	10	$14.82	110	$17.78
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	100	$18.05	10	$14.82	110	$17.78
4801	DRAFTING	27	$14.20	6	$9.75	33	$13.39
480102	Architectural Drafting	13	$14.31	3	$8.83	16	$13.28
480105	Mechanical Drafting	14	$14.10	3	$10.66	17	$13.49
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	38	$13.29	18	$12.21	56	$12.95
480206	Lithographer and Platemaker	12	$15.24	3	$12.41	15	$14.67
480212	Desktop Publishing Equipment Operator	26	$12.40	15	$12.17	41	$12.31
4805	PRECISION METAL WORKERS	133	$16.55	10	$9.66	143	$16.08
480501	Machinist/Machine Technologist	8	$23.57	0	$0.00	8	$23.57
480503	Machine Shop Assistant	43	$16.00	1	$7.00	44	$15.79
480506	Sheet Metal Worker	8	$26.68	0	$0.00	8	$26.68
480507	Tool and Die Maker/Technologist	14	$15.05	3	$12.50	17	$14.60
480508	Welder/Welding Technologist	60	$15.00	6	$9.02	66	$14.45
5004	DESIGN AND APPLIED ART	41	$14.08	20	$9.51	61	$12.56
500401	Design and Visual Communications	36	$14.50	17	$9.75	53	$12.98
500406	Commercial Photography	5	$11.03	3	$8.17	8	$9.96
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	47	$12.46	12	$11.81	59	$12.33
511004	Medical Laboratory Technician	47	$12.46	12	$11.81	59	$12.33
5203	ACCOUNTING	128	$14.36	15	$9.38	143	$13.84
520302	Accounting Technician	128	$14.36	15	$9.38	143	$13.84
5208	FINANCIAL MANAGEMENT SERVICES	9	$15.58	0	$0.00	9	$15.58
520803	Banking and Financial Support Services	9	$15.58	0	$0.00	9	$15.58
	Associate Degree	294	$14.45	65	$9.61	359	$13.58
	Advanced Certificate (30 hours or more)	129	$16.81	19	$14.92	148	$16.57
	Basic Certificate (Less than 30 hours)	232	$15.61	39	$10.99	271	$14.93
	REPORT TOTAL/AVERAGE	655	$15.33	123	$10.84	778	$14.62

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study

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Table B-10

PERCENT JOB SATISFACTION FOR EMPLOYED GRADUATES
WORKING IN POSITIONS RELATED AND UNRELATED TO THEIR COMMUNITY COLLEGE PROGRAMS

CIP	PROGRAM	EMPLOYED GRADUATES WORKING IN A RELATED POSITION NUMBER	% SATISFIED	EMPLOYED GRADUATES WORKING IN AN UNRELATED POSITION NUMBER	%SATISFIED	EMPLOYED GRADUATES WORKING IN RELATED AND UNRELATED POSITIONS NUMBER	% SATISFIED
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	8	50.0 %	2	100.0 %	10	60.0 %
120301	Funeral Services and Mortuary Science	8	50.0	2	100.0	10	60.0
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	14	71.4	2	100.0	16	75.0
150702	Quality Control Technology/Technician	14	71.4	2	100.0	16	75.0
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	89	91.0	37	97.6	126	94.1
150805	Mechanical Engineering/Mechanical Technology/Technician	13	76.9	5	0.0	18	55.6
150810	Computer-aided Design	76	93.4	32	78.1	108	88.9
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	21	66.7	5	80.0	26	69.2
200501	Home Furnishings and Equipment Installers and Consultants, General	21	66.7	5	80.0	26	69.2
2503	LIBRARY ASSISTANT	26	96.2	5	60.0	31	90.3
250301	Library Assistant	26	96.2	5	60.0	31	90.3
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPAIF	107	92.5	25	60.0	132	86.4
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	107	92.5	25	60.0	132	86.4
4801	DRAFTING	33	81.8	12	83.3	45	75.6
480102	Architectural Drafting	14	78.6	6	100.0	20	85.0
480105	Mechanical Drafting	19	84.2	6	66.7	25	68.0
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	37	83.8	27	51.9	64	70.3
480206	Lithographer and Platemaker	8	87.5	9	66.7	17	76.5
480212	Desktop Publishing Equipment Operator	29	82.8	18	44.4	47	66.1
4805	PRECISION METAL WORKERS	122	82.8	47	80.9	169	82.2
480501	Machinist/Machine Technologist	9	55.6	1	100.0	10	60.0
480503	Machine Shop Assistant	34	79.4	15	80.0	49	80.0
480506	Sheet Metal Worker	5	100.0	—	—	5	100.0
480507	Tool and Die Maker/Technologist	18	88.9	1	0.0	19	84.2
480508	Welder/Welding Technologist	56	85.7	30	83.3	86	84.9
5004	DESIGN AND APPLIED ART	43	90.7	27	63.0	70	80.0
500401	Design and Visual Communications	38	92.1	22	63.6	60	81.7
500406	Commercial Photography	5	80.0	5	60.0	10	70.0
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	46	89.1	15	46.7	61	78.7
511004	Medical Laboratory Technician	46	89.1	15	46.7	61	78.7
*5203	ACCOUNTING	121	84.3	42	71.4	163	81.0
520302	Accounting Technician	121	84.3	42	71.4	163	81.0
5208	FINANCIAL MANAGEMENT SERVICES	9	88.9	2	100.0	11	91.0
520803	Banking and Financial Support Services	9	88.9 %	2	100.0 %	11	91.0 %
	Associate Degree	303	83.2 %	105	67.6 %	408	79.2 %
	Advanced Certificate (30 hours or more)	128	85.9 %	42	57.1 %	170	78.8 %
	Basic Certificate (Less than 30 hours)	245	89.8 %	101	70.3 %	346	84.1 %
	Report Total/Average	676	86.1 %	248	66.9 %	924	81.0 %

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study

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Table B-11

GRADUATE PERCENT SATISFACTION WITH MAJOR PROGRAM COMPONENTS
FOR SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	COURSE CONTENT	LECTURE/LAB EXPERIENCE	EQUIPMENT FACILITIES MATERIALS	JOB PREPARATION	PREPARATION FOR FURTHER EDUCATION	LABOR MARKET EMPLOYMENT INFORMATION	OVERALL AVERAGE
1203	FUNERAL SERVICES AND MORTUARY SCIENCE	94.1 %	88.2 %	100.0 %	82.4 %	82.4 %	70.6 %	86.3 %
120301	Funeral Services and Mortuary Science	94.1	88.2	100.0	82.4	82.4	70.6	86.3
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	100.0	100.0	86.7	92.3	85.7	80.0	91.0
150702	Quality Control Technology/Technician	100.0	100.0	86.7	92.3	85.7	80.0	91.0
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	92.5	93.5	93.6	83.8	86.1	72.5	87.2
150805	Mechanical Engineering/Mechanical Technology/Technician	90.5	83.3	88.2	88.9	77.8	66.6	83.3
150810	Computer-aided Design	92.9	95.0	94.4	83.1	87.4	73.0	87.8
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	96.7	100.0	90.0	75.8	92.3	84.3	88.6
200501	Home Furnishings and Equipment Installers and Consultants, General	96.7	100.0	90.0	75.9	92.3	84.3	88.6
2503	LIBRARY ASSISTANT	91.7	91.7	91.4	94.4	85.3	88.9	90.6
250301	Library Assistant	91.7	91.7	91.4	94.4	85.3	88.9	90.6
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPAIRE	94.7	92.1	87.4	87.1	91.0	78.0	88.5
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	94.7	92.1	87.4	87.1	91.0	78.0	88.5
4801	DRAFTING	98.3	98.3	91.4	76.8	85.5	81.1	88.8
480102	Architectural Drafting	96.6	96.6	86.2	75.0	82.1	86.5	87.6
480105	Mechanical Drafting	100.0	100.0	96.6	78.6	88.9	74.1	90.0
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	94.7	94.6	88.2	82.8	84.1	63.0	84.6
480206	Lithographer and Platemaker	88.9	88.9	77.8	80.8	77.8	61.5	79.4
480212	Desktop Publishing Equipment Operator	97.0	96.9	92.4	83.3	86.9	63.6	86.7
4805	PRECISION METAL WORKERS	96.8	96.7	88.3	89.5	91.7	79.8	90.6
480501	Machinist/Machine Technologist	100.0	100.0	100.0	100.0	100.0	100.0	100.0
480503	Machine Shop Assistant	96.7	96.3	79.7	87.9	89.7	89.6	87.1
480506	Sheet Metal Worker	100.0	88.9	77.8	88.9	77.8	87.5	86.8
480507	Tool and Die Maker/Technologist	96.0	91.7	83.3	91.3	95.5	80.0	89.9
480508	Welder/Welding Technologist	96.3	97.2	93.5	88.7	92.4	82.2	91.8
5004	DESIGN AND APPLIED ART	97.8	96.7	91.1	84.1	89.9	64.0	87.4
500401	Design and Visual Communications	97.5	96.1	93.4	82.4	89.3	62.7	87.0
500406	Commercial Photography	100.0	100.0	78.6	92.9	92.9	71.4	89.3
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	95.1	92.7	81.7	88.9	85.2	75.0	86.4
511004	Medical Laboratory Technician	95.1	92.7	81.7	88.9	85.2	75.0	86.4
5203	ACCOUNTING	97.4	93.4	94.8	86.9	90.3	75.2	90.0
520302	Accounting Technician	97.4	93.4	94.8	86.9	90.3	75.2	90.0
5208	FINANCIAL MANAGEMENT SERVICES	100.0	100.0	100.0	100.0	100.0	83.3	97.2
520803	Banking and Financial Support Services	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	83.3 %	97.2 %
	Associate Degree	96.3 %	95.4 %	90.9 %	86.0 %	87.7 %	74.8 %	88.8 %
	Advanced Certificate (30 hours or more)	94.8 %	92.8 %	88.2 %	84.7 %	89.4 %	70.8 %	86.6 %
	Basic Certificate (Less than 30 hours)	95.9 %	94.5 %	92.0 %	87.2 %	89.8 %	76.9 %	89.6 %
	REPORT TOTAL/AVERAGE	95.9 %	94.8 %	90.4 %	86.2 %	88.8 %	74.7 %	88.6 %

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study.

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Table B-12

GRADUATE PERCENT SATISFACTION WITH SERVICES AND NUMBER OF RESPONDENTS
FOR SELECTED CAREER AND TECHNICAL EDUCATION PROGRAMS

CIP	PROGRAM	FINANCIAL AID	ACADEMIC ADVISING	CAREER PLANNING	TRANSFER PLANNING	COUNSELING	TUTORING	LIBRARY AUDIO VISUAL	STUDENT ACTIVITY	OVERALL AVERAGE
1303	FUNERAL SERVICES AND MORTUARY SCIENCE	81.7% (12)	72.7% (11)	25.0% (8)	75.0% (8)	85.7% (7)	87.5% (8)	100.0% (12)	100.0% (7)	80.8% (73)
120301	Funeral Services and Mortuary Science	81.7% (12)	72.7% (11)	25.0% (8)	75.0% (8)	85.7% (7)	87.5% (8)	100.0% (12)	100.0% (7)	80.8% (73)
1507	QUALITY CONTROL AND SAFETY TECHNOLOGIES	80.0% (5)	83.3% (12)	42.9% (7)	40.0% (5)	66.7% (6)	100.0% (2)	83.3% (12)	50.0% (4)	69.8% (53)
150702	Quality Control Technology/Technician	80.0% (5)	83.3% (12)	42.9% (7)	40.0% (5)	66.7% (6)	100.0% (2)	83.3% (12)	50.0% (4)	69.8% (53)
1508	MECHANICAL ENGINEERING-RELATED TECHNOLOGIES	84.0% (50)	78.2% (101)	73.5% (68)	75.5% (49)	69.9% (83)	88.0% (50)	84.3% (89)	90.6% (38)	80.6% (527)
150805	Mechanical Engineering/Mechanical Technology/Technician	83.3% (6)	68.8% (16)	60.0% (10)	77.8% (9)	45.5% (11)	80.0% (5)	77.8% (9)	90.0% (5)	69.0% (71)
150810	Computer-aided Design	84.1% (44)	80.0% (85)	75.9% (58)	75.0% (40)	73.6% (72)	88.9% (45)	96.2% (79)	87.9% (33)	82.7% (456)
2005	HOME FURNISHINGS AND EQUIPMENT INSTALLERS AND CONSULTANTS	60.0% (5)	83.3% (18)	54.5% (11)	85.7% (7)	57.1% (7)	100.0% (6)	100.0% (25)	100.0% (9)	84.1% (88)
200501	Home Furnishings and Equipment Installers and Consultants, General	60.0% (5)	83.3% (18)	54.5% (11)	85.7% (7)	57.1% (7)	100.0% (6)	100.0% (25)	100.0% (9)	84.1% (88)
2503	LIBRARY ASSISTANT	50.0% (8)	100.0% (19)	81.7% (12)	50.0% (4)	90.9% (11)	100.0% (5)	100.0% (29)	100.0% (3)	92.0% (88)
250301	Library Assistant	50.0% (8)	100.0% (19)	81.7% (12)	50.0% (4)	90.9% (11)	100.0% (5)	100.0% (29)	100.0% (3)	92.0% (88)
4702	HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND REPAIR	86.4% (59)	90.2% (82)	83.1% (71)	82.9% (41)	90.5% (74)	90.7% (43)	96.7% (92)	97.8% (45)	90.1% (507)
470201	Heating, Air Conditioning, and Refrigeration Mechanics and Repairers	86.4% (59)	90.2% (82)	83.1% (71)	82.9% (41)	90.5% (74)	90.7% (43)	96.7% (92)	97.8% (45)	90.1% (507)
4801	DRAFTING	88.0% (26)	82.9% (41)	78.9% (26)	85.0% (20)	80.0% (30)	90.0% (20)	100.0% (38)	73.7% (16)	85.4% (218)
480102	Architectural Drafting	81.3% (16)	86.4% (22)	66.7% (15)	84.6% (13)	82.4% (17)	84.6% (13)	100.0% (20)	69.2% (13)	85.3% (129)
480105	Mechanical Drafting	100.0% (9)	78.9% (19)	63.6% (11)	85.7% (7)	78.9% (19)	100.0% (7)	100.0% (18)	83.3% (6)	85.0% (80)
4802	GRAPHIC AND PRINTING EQUIPMENT OPERATORS	78.9% (38)	84.4% (77)	87.2% (39)	73.3% (30)	80.7% (57)	92.3% (26)	91.4% (58)	81.3% (32)	80.9% (377)
480208	Lithographer and Platemaker	93.8% (16)	69.6% (23)	73.7% (19)	81.3% (16)	85.0% (20)	84.6% (13)	81.3% (16)	75.0% (16)	79.9% (139)
480212	Desktop Publishing Equipment Operator	88.2% (23)	80.7% (54)	84.1% (39)	84.3% (14)	78.4% (37)	100.0% (13)	95.2% (42)	87.5% (16)	81.5% (238)
4805	PRECISION METAL WORKERS	89.7% (78)	88.5% (104)	82.1% (78)	77.1% (48)	82.6% (87)	80.0% (50)	91.6% (95)	81.1% (37)	84.6% (587)
480501	Machinist/Machine Technologist	— (0)	100.0% (3)	100.0% (1)	100.0% (1)	100.0% (2)	100.0% (2)	100.0% (1)	100.0% (2)	100.0% (12)
480503	Machine Shop Assistant	83.3% (24)	78.9% (38)	70.4% (27)	65.2% (16)	78.9% (38)	70.6% (17)	87.5% (32)	75.0% (12)	77.3% (207)
480508	Sheet Metal Worker	100.0% (2)	100.0% (1)	100.0% (2)	100.0% (1)	100.0% (1)	100.0% (1)	100.0% (1)	0.0% (1)	90.0% (10)
480507	Tool and Die Maker/Technologist	83.3% (6)	100.0% (10)	100.0% (10)	100.0% (6)	75.0% (4)	100.0% (2)	100.0% (12)	66.7% (3)	94.3% (53)
480508	Welder/Welding Technologist	93.5% (46)	88.5% (52)	84.2% (38)	81.0% (21)	85.7% (42)	82.1% (28)	92.3% (39)	88.5% (19)	87.7% (265)
5004	DESIGN AND APPLIED ART	75.0% (40)	81.3% (75)	88.7% (55)	87.8% (37)	78.5% (51)	88.8% (36)	95.0% (58)	82.1% (39)	78.7% (403)
500401	Design and Visual Communications	77.1% (25)	78.1% (64)	85.5% (49)	84.7% (34)	75.6% (45)	87.5% (32)	94.7% (57)	80.6% (36)	78.4% (352)
500408	Commercial Photography	80.0% (5)	100.0% (11)	66.7% (6)	100.0% (3)	83.3% (6)	83.3% (6)	100.0% (11)	100.0% (3)	86.2% (51)
5110	HEALTH AND MEDICAL LABORATORY TECHNOLOGIES/TECHNICIANS	82.9% (35)	74.5% (47)	73.5% (34)	72.0% (25)	78.8% (39)	82.6% 923)	89.4% (47)	73.3% (15)	78.9% (265)
511004	Medical Laboratory Technician	82.9% (35)	74.5% (47)	73.5% (34)	72.0% (25)	78.8% (39)	82.6% (23)	89.4% (47)	73.3% (15)	78.9% (265)
5203	ACCOUNTING	88.0% (100)	82.9% (164)	78.8% (114)	73.3% (60)	78.1% (128)	83.6% (73)	92.0% (150)	84.2% (57)	83.2% (846)
520303	Accounting Technician	88.0% (100)	82.9% (164)	78.8% (114)	73.3% (60)	78.1% (128)	83.6% (73)	92.0% (150)	84.2% (57)	83.2% (846)
5208	FINANCIAL MANAGEMENT SERVICES	66.7% (3)	77.8% (9)	0.0% (2)	66.7% (3)	85.7% (7)	66.7% (3)	100.0% (11)	100.0% (2)	80.0% (40)
520803	Banking and Financial Support Services	66.7% (3)	77.8% (9)	0.0% (2)	66.7% (3)	85.7% (7)	66.7% (3)	100.0% (11)	100.0% (2)	80.0% (40)
	Associate Degree	80.1% (223)	82.5% (383)	73.5% (272)	78.3% (175)	77.6% (278)	88.4% (173)	95.0% (361)	83.6% (171)	83.5% (2,034)
	Advanced Certificate (30 hours or more)	84.1% (68)	85.1% (134)	87.0% (103)	85.3% (48)	79.3% (121)	84.1% (63)	92.1% (126)	78.0% (50)	80.8% (734)
	Basic Certificate (Less than 30 hours)	89.1% (146)	83.5% (243)	81.1% (169)	73.5% (113)	81.9% (190)	84.7% (111)	93.8% (227)	81.9% (86)	84.1% (1,285)
	REPORT TOTAL/AVERAGE	83.6% (457)	83.3% (760)	74.5% (544)	74.6% (337)	79.4% (587)	86.5% (347)	94.1% (714)	85.0% (307)	83.2% (4,053)

*Correctional & deceased students are not included in these totals

SOURCE OF DATA: Fiscal Year 2003 Follow-Up Study

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Appendix C

College-level Follow-up Study Tables For Selected Career and Technical Education Programs by Classification of Instructional Program Code

Illinois Community College Board

Table C
FOLLOW-UP STUDY SUMMARY BY COLLEGE AND CIP

College	Number Surveyed	Number Responding	Response Rate	Combined Employment or Continuing Ed Rate	Employ-ment Rate	Continuing Education Rate	Unemployed/ Seeking Employment Rate
120301 - Funeral Services and Mortuary Sciences							
50803 Malcolm X	17	12	70.6%	60.0%	50.0%	40.0%	30.0%
51801 Sandburg	13	5	38.5%	100.0%	100.0%	20.0%	0.0%
Total	30	17	56.7%	73.3%	66.7%	33.3%	20.0%
150702 - Quality Control and Safety Technologies							
51101 Rock Valley	6	4	66.7%	100.0%	100.0%	0.0%	0.0%
52401 Moraine Valley	9	5	55.6%	80.0%	80.0%	20.0%	0.0%
52901 Lincoln Trail	2	2	100.0%	100.0%	100.0%	0.0%	0.0%
52904 Frontier	6	6	100.0%	100.0%	100.0%	33.3%	0.0%
Total	23	17	73.9%	94.1%	94.1%	17.6%	0.0%
150805 - Mechanical Engineering/Mechanical Technology/Technician							
50401 Triton	3	0	0.0%	—	—	—	—
50601 Sauk Valley	2	1	50.0%	100.0%	100.0%	100.0%	0.0%
51201 Harper	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
51401 Illinois Central	6	4	66.7%	100.0%	75.0%	100.0%	0.0%
51501 Prairie State	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
51801 Sandburg	2	2	100.0%	50.0%	50.0%	50.0%	0.0%
52401 Moraine Valley	7	7	100.0%	85.7%	85.7%	42.9%	14.3%
52501 Joliet	8	2	25.0%	100.0%	100.0%	50.0%	0.0%
52801 McHenry	1	0	0.0%	—	—	—	—
52901 Lincoln Trail	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
53201 Lake County	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
53501 Oakton	3	1	33.3%	100.0%	100.0%	0.0%	0.0%
Total	36	21	58.3%	90.5%	85.7%	47.6%	4.8%
150810 - Computer-aided Design							
50201 DuPage	5	4	80.0%	100.0%	100.0%	0.0%	0.0%
50301 Black Hawk	1	1	100.0%	100.0%	100.0%	100.0%	0.0%
50401 Triton	14	4	28.6%	100.0%	100.0%	25.0%	0.0%
50501 Parkland	5	4	80.0%	100.0%	100.0%	50.0%	0.0%
50601 Sauk Valley	2	0	0.0%	—	—	—	—
50701 Danville	3	2	66.7%	0.0%	0.0%	0.0%	100.0%
50807 Wright	23	6	26.1%	100.0%	80.0%	20.0%	0.0%
50901 Elgin	71	36	50.7%	91.7%	91.7%	25.0%	5.6%
51001 South Suburban	6	5	83.3%	80.0%	80.0%	20.0%	20.0%
51101 Rock Valley	7	2	28.6%	100.0%	100.0%	0.0%	0.0%
51301 Illinois Valley	10	4	40.0%	100.0%	100.0%	50.0%	0.0%
51401 Illinois Central	5	4	80.0%	75.0%	75.0%	75.0%	0.0%
51501 Prairie State	2	0	0.0%	—	—	—	—
51601 Waubonsee	8	5	62.5%	100.0%	100.0%	40.0%	0.0%
51701 Lake Land	8	2	25.0%	100.0%	100.0%	50.0%	0.0%
52001 Kankakee	13	5	38.5%	100.0%	80.0%	40.0%	20.0%
52101 Rend Lake	2	1	50.0%	100.0%	100.0%	0.0%	0.0%
52301 Kishwaukee	7	4	57.1%	75.0%	75.0%	25.0%	25.0%
52401 Moraine Valley	10	6	60.0%	100.0%	100.0%	16.7%	0.0%
52701 Morton	7	4	57.1%	100.0%	100.0%	0.0%	0.0%
52801 McHenry	2	2	100.0%	100.0%	100.0%	50.0%	0.0%
53001 Logan	10	6	60.0%	100.0%	66.7%	50.0%	0.0%
53201 Lake County	13	3	23.1%	100.0%	100.0%	0.0%	0.0%
53501 Oakton	17	11	64.7%	81.8%	72.7%	27.3%	18.2%
53601 Lewis & Clark	16	14	87.5%	100.0%	100.0%	21.4%	0.0%
53901 Wood	1	1	100.0%	100.0%	100.0%	0.0%	0.0%

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Table C
FOLLOW-UP STUDY SUMMARY BY COLLEGE AND CIP

College	Number Surveyed	Number Responding	Response Rate	Combined Employment or Continuing Ed Rate	Employ-ment Rate	Continuing Education Rate	Unemployed/ Seeking Employment Rate
54001 Heartland	5	1	20.0%	100.0%	100.0%	0.0%	0.0%
Total	273	137	50.2%	92.6%	88.9%	27.2%	6.7%
200501 - Home Furnishings and Equipment Installers and Consultants, General							
50201 DuPage	8	4	50.0%	100.0%	100.0%	25.0%	0.0%
50401 Triton	3	1	33.3%	0.0%	0.0%	0.0%	100.0%
51201 Harper	16	15	93.8%	85.7%	85.7%	13.3%	0.0%
51401 Illinois Central	1	1	100.0%	100.0%	100.0%	100.0%	0.0%
51501 Prairie State	7	4	57.1%	100.0%	100.0%	0.0%	0.0%
52501 Joliet	5	5	100.0%	100.0%	100.0%	60.0%	0.0%
Total	40	30	75.0%	89.7%	89.7%	23.3%	3.4%
250301 - Library Assistant							
50201 DuPage	43	27	62.8%	92.6%	88.9%	7.4%	0.0%
50301 Black Hawk	6	5	83.3%	80.0%	80.0%	20.0%	0.0%
51401 Illinois Central	2	1	50.0%	100.0%	100.0%	0.0%	0.0%
53201 Lake County	2	1	50.0%	0.0%	0.0%	0.0%	0.0%
53601 Lewis & Clark	3	2	66.7%	100.0%	100.0%	0.0%	0.0%
Total	56	36	64.3%	88.9%	86.1%	8.3%	0.0%
470201 - Heating, Air Conditioning, and Refrigeration Mechanics and Repairers							
50201 DuPage	34	18	52.9%	83.3%	77.8%	44.4%	16.7%
50401 Triton	13	10	76.9%	100.0%	100.0%	10.0%	0.0%
50601 Sauk Valley	8	5	62.5%	100.0%	80.0%	60.0%	0.0%
50801 Kennedy-King	4	2	50.0%	100.0%	50.0%	100.0%	50.0%
50901 Elgin	14	9	64.3%	100.0%	77.8%	66.7%	0.0%
51201 Harper	23	15	65.2%	76.9%	80.0%	7.7%	20.0%
51401 Illinois Central	2	0	0.0%	—	—	—	—
51501 Prairie State	13	5	38.5%	80.0%	60.0%	20.0%	40.0%
51601 Waubonsee	12	8	66.7%	100.0%	100.0%	50.0%	0.0%
52001 Kankakee	2	2	100.0%	100.0%	100.0%	50.0%	0.0%
52101 Rend Lake	6	3	50.0%	100.0%	100.0%	0.0%	0.0%
52201 Southwestern	33	15	45.5%	93.3%	86.7%	13.3%	6.7%
52401 Moraine Valley	8	2	25.0%	50.0%	50.0%	0.0%	0.0%
52501 Joliet	1	0	0.0%	—	—	—	—
52601 Lincoln Land	12	8	66.7%	100.0%	100.0%	14.3%	0.0%
52701 Morton	6	6	100.0%	100.0%	100.0%	0.0%	0.0%
52901 Lincoln Trail	15	12	80.0%	100.0%	100.0%	0.0%	0.0%
53001 Logan	11	9	81.8%	100.0%	66.7%	44.4%	0.0%
53201 Lake County	46	18	39.1%	100.0%	94.4%	50.0%	5.6%
53501 Oakton	7	4	57.1%	100.0%	100.0%	25.0%	0.0%
53701 Richland	2	2	100.0%	100.0%	100.0%	0.0%	0.0%
Total	272	153	56.3%	94.0%	86.9%	29.3%	7.2%
480102 - Architectural Drafting							
50101 Kaskaskia	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
50201 DuPage	4	4	100.0%	100.0%	100.0%	50.0%	0.0%
50401 Triton	1	0	0.0%	—	—	—	—
50807 Wright	5	1	20.0%	0.0%	0.0%	0.0%	0.0%
51101 Rock Valley	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
51201 Harper	16	8	50.0%	100.0%	100.0%	42.9%	0.0%
51401 Illinois Central	1	0	0.0%	—	—	—	—
51701 Lake Land	7	3	42.9%	66.7%	66.7%	0.0%	33.3%
52101 Rend Lake	8	5	62.5%	100.0%	80.0%	60.0%	20.0%

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Table C
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College	Number Surveyed	Number Responding	Response Rate	Combined Employment or Continuing Ed Rate	Employ-ment Rate	Continuing Education Rate	Unemployed/ Seeking Employment Rate
52601 Lincoln Land	4	2	50.0%	100.0%	100.0%	0.0%	0.0%
52901 Lincoln Trail	8	5	62.5%	60.0%	40.0%	60.0%	60.0%
53501 Oakton	1	0	0.0%	—	—	—	—
Total	57	30	52.6%	89.3%	82.8%	39.3%	17.2%
480105 - Mechanical Drafting							
50401 Triton	1	0	0.0%	—	—	—	—
50501 Parkland	2	2	100.0%	50.0%	50.0%	50.0%	0.0%
50804 Truman	3	2	66.7%	100.0%	100.0%	0.0%	0.0%
52201 Southwestern	8	6	75.0%	100.0%	100.0%	16.7%	0.0%
52401 Moraine Valley	7	6	85.7%	100.0%	100.0%	33.3%	0.0%
52701 Morton	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
53201 Lake County	3	2	66.7%	100.0%	100.0%	0.0%	0.0%
53701 Richland	11	11	100.0%	100.0%	90.9%	36.4%	9.1%
Total	36	30	83.3%	96.6%	93.1%	27.6%	3.4%
480206 - Lithographer and Platemaker							
50401 Triton	14	5	35.7%	80.0%	80.0%	0.0%	20.0%
50801 Kennedy-King	30	14	46.7%	75.0%	58.3%	41.7%	16.7%
51001 South Suburban	5	4	80.0%	100.0%	75.0%	25.0%	25.0%
51401 Illinois Central	5	4	80.0%	75.0%	75.0%	0.0%	25.0%
Total	54	27	50.0%	80.0%	68.0%	24.0%	20.0%
480212 - Desktop Publishing Equipment Operator							
50201 DuPage	52	33	63.5%	72.7%	69.7%	33.3%	15.2%
50401 Triton	3	1	33.3%	100.0%	100.0%	0.0%	0.0%
50501 Parkland	8	6	75.0%	83.3%	83.3%	0.0%	16.7%
50901 Elgin	2	1	50.0%	100.0%	100.0%	0.0%	0.0%
51301 Illinois Valley	5	4	80.0%	100.0%	100.0%	25.0%	0.0%
51401 Illinois Central	4	4	100.0%	100.0%	50.0%	50.0%	25.0%
51701 Lake Land	6	4	66.7%	75.0%	75.0%	25.0%	0.0%
51801 Sandburg	3	2	66.7%	100.0%	100.0%	0.0%	0.0%
52201 Southwestern	3	3	100.0%	66.7%	66.7%	0.0%	0.0%
52401 Moraine Valley	4	2	50.0%	100.0%	100.0%	0.0%	0.0%
52501 Joliet	4	3	75.0%	66.7%	33.3%	33.3%	66.7%
53201 Lake County	5	4	80.0%	75.0%	75.0%	25.0%	0.0%
53501 Oakton	4	0	0.0%	—	—	—	—
Total	103	67	65.0%	79.1%	73.1%	25.4%	13.4%
480501 - Machinist/Machine Technologist							
52201 Southwestern	36	13	36.1%	84.6%	84.6%	0.0%	7.7%
Total	36	13	36.1%	84.6%	84.6%	0.0%	7.7%
480503 - Machine Shop Assistant							
50301 Black Hawk	1	0	0.0%	—	—	—	—
50401 Triton	5	4	80.0%	75.0%	75.0%	0.0%	25.0%
50601 Sauk Valley	2	2	100.0%	50.0%	50.0%	0.0%	50.0%
50806 Daley	24	13	54.2%	81.8%	75.0%	0.0%	25.0%
50901 Elgin	2	1	50.0%	100.0%	100.0%	0.0%	0.0%
51001 South Suburban	5	4	80.0%	100.0%	100.0%	75.0%	0.0%
51301 Illinois Valley	2	1	50.0%	100.0%	100.0%	100.0%	0.0%
51501 Prairie State	2	2	100.0%	100.0%	50.0%	50.0%	0.0%
51601 Waubonsee	4	3	75.0%	100.0%	100.0%	66.7%	0.0%
52001 Kankakee	1	1	100.0%	100.0%	100.0%	0.0%	0.0%

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College	Number Surveyed	Number Responding	Response Rate	Combined Employment or Continuing Ed Rate	Employ-ment Rate	Continuing Education Rate	Unemployed/ Seeking Employment Rate
52201 Southwestern	8	3	37.5%	66.7%	66.7%	0.0%	33.3%
52301 Kishwaukee	2	2	100.0%	100.0%	100.0%	0.0%	0.0%
52401 Moraine Valley	2	1	50.0%	100.0%	100.0%	0.0%	0.0%
52801 McHenry	1	0	0.0%	—	—	—	—
52903 Wabash Valley	8	6	75.0%	100.0%	83.3%	33.3%	0.0%
53201 Lake County	6	5	83.3%	80.0%	80.0%	20.0%	20.0%
53501 Oakton	8	5	62.5%	100.0%	80.0%	0.0%	0.0%
53601 Lewis & Clark	6	6	100.0%	100.0%	83.3%	50.0%	0.0%
53701 Richland	2	2	100.0%	100.0%	100.0%	0.0%	0.0%
Total	91	61	67.0%	89.7%	81.7%	22.4%	11.7%
480506 - Sheet Metal Worker							
51101 Rock Valley	13	7	53.8%	85.7%	85.7%	0.0%	14.3%
52201 Southwestern	4	2	50.0%	100.0%	100.0%	0.0%	0.0%
Total	17	9	52.9%	88.9%	88.9%	0.0%	11.1%
480507 - Tool and Die Maker/Technologist							
50201 DuPage	11	4	36.4%	75.0%	75.0%	0.0%	25.0%
50301 Black Hawk	1	0	0.0%	—	—	—	—
50401 Triton	2	0	0.0%	—	—	—	—
50901 Elgin	4	2	50.0%	100.0%	100.0%	50.0%	0.0%
51101 Rock Valley	22	13	59.1%	76.9%	69.2%	30.8%	30.8%
52001 Kankakee	2	2	100.0%	100.0%	100.0%	0.0%	0.0%
52301 Kishwaukee	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
53001 Logan	5	4	80.0%	100.0%	100.0%	50.0%	0.0%
53201 Lake County	1	0	0.0%	—	—	—	—
Total	49	26	53.1%	84.6%	80.8%	26.9%	19.2%
480508 - Welder/Welding Technologist							
50101 Kaskaskia	4	3	75.0%	66.7%	66.7%	0.0%	0.0%
50201 DuPage	2	2	100.0%	100.0%	100.0%	0.0%	0.0%
50301 Black Hawk	3	2	66.7%	100.0%	100.0%	0.0%	0.0%
50401 Triton	2	1	50.0%	100.0%	100.0%	0.0%	0.0%
50701 Danville	8	3	37.5%	100.0%	100.0%	0.0%	0.0%
50801 Kennedy-King	3	1	33.3%	100.0%	100.0%	0.0%	0.0%
50901 Elgin	9	5	55.6%	100.0%	100.0%	20.0%	0.0%
51101 Rock Valley	1	0	0.0%	—	—	—	—
51401 Illinois Central	9	3	33.3%	66.7%	66.7%	0.0%	33.3%
51801 Sandburg	2	1	50.0%	0.0%	0.0%	0.0%	100.0%
52001 Kankakee	3	1	33.3%	100.0%	100.0%	0.0%	0.0%
52101 Rend Lake	9	3	33.3%	100.0%	100.0%	0.0%	0.0%
52201 Southwestern	122	65	53.3%	84.1%	78.5%	17.5%	18.5%
52401 Moraine Valley	8	4	50.0%	100.0%	100.0%	0.0%	0.0%
52601 Lincoln Land	6	5	83.3%	80.0%	80.0%	40.0%	20.0%
52902 Olney Central	8	6	75.0%	83.3%	66.7%	33.3%	33.3%
53201 Lake County	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
53301 Southeastern	4	4	100.0%	50.0%	50.0%	25.0%	25.0%
54001 Heartland	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
Total	205	111	54.1%	84.4%	80.2%	15.6%	16.2%
500401 - Design and Visual Communications							
50201 DuPage	56	30	53.6%	93.3%	73.3%	50.0%	6.7%
50401 Triton	9	5	55.6%	80.0%	80.0%	20.0%	0.0%
50802 Washington	1	1	100.0%	100.0%	100.0%	0.0%	0.0%

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College	Number Surveyed	Number Responding	Response Rate	Combined Employment or Continuing Ed Rate	Employ-ment Rate	Continuing Education Rate	Unemployed/ Seeking Employment Rate
50901 Elgin	23	9	39.1%	100.0%	100.0%	33.3%	0.0%
51001 South Suburban	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
51401 Illinois Central	22	10	45.5%	90.0%	90.0%	30.0%	10.0%
51501 Prairie State	6	4	66.7%	100.0%	25.0%	100.0%	25.0%
51601 Waubonsee	1	1	100.0%	0.0%	0.0%	0.0%	100.0%
51901 Highland	8	6	75.0%	100.0%	100.0%	16.7%	0.0%
52201 Southwestern	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
52401 Moraine Valley	10	7	70.0%	100.0%	57.1%	57.1%	28.6%
53501 Oakton	11	4	36.4%	100.0%	75.0%	25.0%	25.0%
53601 Lewis & Clark	4	4	100.0%	100.0%	100.0%	0.0%	0.0%
53701 Richland	2	1	50.0%	100.0%	100.0%	0.0%	0.0%
Total	155	84	54.2%	94.0%	78.6%	38.1%	9.5%
500406 - Commercial Photography							
50201 DuPage	15	13	86.7%	100.0%	76.9%	69.2%	0.0%
51501 Prairie State	4	1	25.0%	0.0%	0.0%	0.0%	0.0%
Total	19	14	73.7%	92.9%	71.4%	64.3%	0.0%
511004 - Medical Laboratory Technology							
50601 Sauk Valley	5	2	40.0%	100.0%	100.0%	0.0%	0.0%
50803 Malcolm X	9	7	77.8%	100.0%	80.0%	40.0%	20.0%
50804 Truman	7	0	0.0%	—	—	—	—
50806 Daley	3	2	66.7%	100.0%	100.0%	0.0%	0.0%
50807 Wright	21	12	57.1%	100.0%	100.0%	28.6%	0.0%
50901 Elgin	6	3	50.0%	100.0%	66.7%	100.0%	0.0%
51401 Illinois Central	4	3	75.0%	100.0%	66.7%	33.3%	0.0%
52001 Kankakee	3	2	66.7%	50.0%	50.0%	50.0%	50.0%
52101 Rend Lake	3	2	66.7%	100.0%	100.0%	0.0%	0.0%
52201 Southwestern	11	7	63.6%	100.0%	100.0%	14.3%	0.0%
52401 Moraine Valley	2	1	50.0%	100.0%	100.0%	0.0%	0.0%
53001 Logan	2	2	100.0%	100.0%	50.0%	50.0%	0.0%
53201 Lake County	49	34	69.4%	88.2%	82.4%	32.4%	2.9%
53301 Southeastern	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
53501 Oakton	2	1	50.0%	100.0%	0.0%	100.0%	0.0%
53601 Lewis & Clark	3	3	100.0%	100.0%	100.0%	0.0%	0.0%
Total	131	82	62.6%	93.2%	84.2%	31.1%	3.9%
520302 - Accounting Technician							
50101 Kaskaskia	3	3	100.0%	100.0%	100.0%	0.0%	0.0%
50201 DuPage	37	26	70.3%	92.3%	84.6%	46.2%	7.7%
50301 Black Hawk	11	9	81.8%	77.8%	55.6%	22.2%	33.3%
50401 Triton	13	5	38.5%	80.0%	60.0%	40.0%	20.0%
50501 Parkland	14	9	64.3%	77.8%	77.8%	22.2%	22.2%
50601 Sauk Valley	10	8	80.0%	100.0%	75.0%	37.5%	0.0%
50701 Danville	9	7	77.8%	71.4%	71.4%	0.0%	14.3%
50802 Washington	7	4	57.1%	25.0%	25.0%	0.0%	75.0%
50803 Malcolm X	2	1	50.0%	0.0%	0.0%	0.0%	0.0%
50804 Truman	8	3	37.5%	100.0%	66.7%	33.3%	133.3%
50805 Olive-Harvey	1	1	100.0%	100.0%	0.0%	100.0%	0.0%
50806 Daley	25	15	60.0%	84.6%	61.5%	38.5%	30.8%
50807 Wright	13	9	69.2%	50.0%	60.0%	0.0%	20.0%
50901 Elgin	3	3	100.0%	66.7%	66.7%	0.0%	33.3%
51001 South Suburban	8	5	62.5%	100.0%	80.0%	60.0%	20.0%
51101 Rock Valley	13	7	53.8%	85.7%	71.4%	28.6%	14.3%

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College	Number Surveyed	Number Responding	Response Rate	Combined Employment or Continuing Ed Rate	Employ-ment Rate	Continuing Education Rate	Unemployed/ Seeking Employment Rate
51201 Harper	33	24	72.7%	81.0%	78.3%	36.4%	13.0%
51301 Illinois Valley	8	6	75.0%	100.0%	100.0%	50.0%	0.0%
51401 Illinois Central	9	5	55.6%	100.0%	100.0%	0.0%	0.0%
51501 Prairie State	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
51601 Waubonsee	9	5	55.6%	80.0%	80.0%	40.0%	20.0%
51701 Lake Land	14	12	85.7%	91.7%	91.7%	0.0%	8.3%
51801 Sandburg	15	11	73.3%	72.7%	63.6%	27.3%	18.2%
51901 Highland	2	0	0.0%	—	—	—	—
52001 Kankakee	6	3	50.0%	100.0%	100.0%	33.3%	0.0%
52201 Southwestern	6	4	66.7%	100.0%	100.0%	0.0%	0.0%
52301 Kishwaukee	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
52401 Moraine Valley	6	6	100.0%	100.0%	66.7%	50.0%	33.3%
52501 Joliet	10	6	60.0%	100.0%	83.3%	50.0%	16.7%
52801 McHenry	3	2	66.7%	100.0%	100.0%	0.0%	0.0%
52902 Olney Central	14	8	57.1%	87.5%	87.5%	0.0%	0.0%
53001 Logan	3	1	33.3%	100.0%	100.0%	0.0%	0.0%
53201 Lake County	13	8	61.5%	62.5%	62.5%	0.0%	12.5%
53501 Oakton	16	8	50.0%	75.0%	75.0%	12.5%	25.0%
53601 Lewis & Clark	7	7	100.0%	100.0%	100.0%	16.7%	0.0%
53901 Wood	4	4	100.0%	75.0%	75.0%	25.0%	25.0%
Total	357	237	66.4%	84.8%	76.9%	26.2%	15.3%
520803 - Banking and Financial Support Services							
50301 Black Hawk	3	1	33.3%	100.0%	100.0%	0.0%	0.0%
50807 Wright	1	0	0.0%	—	—	—	—
51001 South Suburban	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
51101 Rock Valley	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
51201 Harper	3	2	66.7%	0.0%	50.0%	0.0%	50.0%
51401 Illinois Central	2	2	100.0%	100.0%	100.0%	0.0%	0.0%
51601 Waubonsee	3	3	100.0%	100.0%	100.0%	0.0%	0.0%
52201 Southwestern	1	1	100.0%	100.0%	100.0%	0.0%	0.0%
53501 Oakton	1	1	100.0%	100.0%	100.0%	100.0%	0.0%
Total	16	12	75.0%	90.9%	91.7%	9.1%	8.3%

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